

ALASKA LEGISLATURE COMMITTEE FILES 1993-1994 8672

7762 HOUSE HEALTH EDUCATION & SOCIAL SERVICES

wishes smacks of a one-sided treatment rather than a cooperative relationship between the patient and doctor. The implications are great for patient abuse by such a forceful physician and I believe that happened more than once with my daughter. The point is, Dr. Rowan was so convinced of the success of his "HOT" treatment that he forced the procedure on my daughter at least twice carelessly courting further harm to her and ignoring her wishes.

Finally, when this case was picked up by the media in the fall of 1991, Dr. Rowan literally crowed to the television crowd of the benefits of the "HOT" treatment and he frequently used the radio talk show as well. He engaged the help of his cronies Herb Shaindlin and Edgar Boyko to stage dramatic demonstrations which took on a side-show carnival air. He had no regard for the patient, my daughter, her feelings or the fact that he nearly killed her. It was all take-advantage-of-the-media-hype to gain valuable promotional opportunities. This is not acceptable nor the type of representative that should serve on the Alaska State Medical Board. I believe that is highly unprofessional conduct for a physician in whom the public puts its trust. While I have no quarrel with alternative medicine I am adamantly opposed to the appointment of Dr. Robert Rowan to to the State Medical Board for all the above reasons.

Laura and Barron Butler
P.O. Box 187
Kenai, AK 99611

February 23, 1993

RECEIVED FEB 26 1993

Members; Alaska State Senate
Committee on: Health, Education, and Social Services
State Capital
Juneau, AK 99801-1182

Committee Members:

Barron and I respectfully request that as Committee members, you cast an affirmative vote to confirm Governor Hickels' appointment of Dr. Robert Rowen to the State Medical Board.

We feel the nation's average of some thirty percent of medical treatment and care which is now directed to preventative health care speaks well of Governor Hickels stated opinion that a "balanced perspective of this seven member board is best for Alaskans and for the future of health care".

My husband and I feel certain you will find Dr. Robert Rowen's formal medical education and his professional background to be equal to, and in some cases probably greater than, many of the members of the current Alaska Medical Association who, we understand, vehemently oppose Dr. Rowen's appointment to the Board.

At the risk of just sounding like busy-body constituents, I would like to mention we, as a young family over thirty two years ago, came to this State before there were very many "traditional" Medical Doctors! In fact, there weren't ANY within a thirty mile or so radius of where we lived -- so we feel qualified to at least voice our opinion to our Alaska Legislative body on subjects, such as this one, which hold great interest to us as business people, citizens and long time year-round residents.

We Thank you for taking you time in reading our request and letting us express our view on this appointment. We look forward to meeting those of you whom we do not already know, on our next business trip to Juneau.

Very Truly Yours,

Laura Butler

Laura and Barron Butler

cc: Tuckerman Babcock, Director; Boards and Commissions
Members of the House of Representatives
Members of the Alaska State Senate
Governor Walter Hickel
Dr. Robert Rowen
Alaska Medical Association

THE
FOLLOWING
DOCUMENTS
ARE
POOR
ORIGINAL
COPIES

STEVEN L. CARROLL
6261 F 41ST COURT
ANCHORAGE, ALASKA
907-333-6363

February 26, 1993

Health Committee
FAX (907) 465-2137

Dear Committee Members,

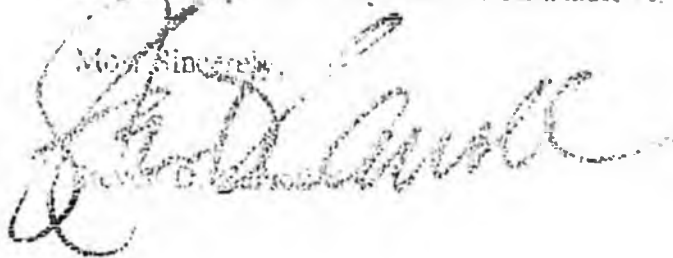
Please accept this letter in support of Robert I. Rowan, M.D.'s re-affirmation to the Alaska Medical Board. As a concerned citizen of Alaska who is extremely concerned with the rights of Alaska citizens to be represented on a board which would be a travesty to justify to allow the Alaska State Medical Association's objections and subsequent "boycott" tactics to impede Dr. Rowan's confirmation.

The presence of an alternative or different view of medicine should be welcomed by the medical community especially the professional associations. It is apparent that the ASMA is frightened, especially in view of the medical reform dialogues currently being deliberated in Washington, but I ask that you not allow their fears to compromise the rights, needs, health and voice of Alaskans.

It is my understanding, from the Assistant Attorney General, Janet T. Kaveshnikov, that Medical Board members should not be representative of a profession, but should, in fact, represent the Alaska people and their interests.

Lastly, I ask that you support the Alaskan people and their interests by confirming Dr. Rowan to this board, if for no other reason, than to add a new and fresh voice which underscores the diversity and independence Alaskans have always demonstrated.

Most Sincerely,



For HESS (MTE)

To: Senator Steve Rieger

Reasons why Dr Rowen should not be appointed to the state medical board -

1. He does not practice medicine. Alternative

medicine is quackery (he admits that point). If

there were a board of medical quackery, I would

support his appointment as chairman.

2. He hurts patients. He dissuades legitimate

treatment methods for unproven ones. Some people get

considerably sicker before they finally are seen by

legitimate physicians. He convinces people that the

world is a poisonous place and that they should

buy distilled water, replace amalgam fillings, remove

silicone breast implants, etc, etc. These folks tend to

be totally neurotic - then he treats them.

3. His ethics are at ground level. We resent

being judged by him. To repeat the zoology of

which I am most proud - it would be as if

George Hown were appointed to the legislative ethics

committee. The reaction would likely make the 6 o'clock

news.

4. He has a well organized fan club. He has

cultivated some high-powered friendships - the governor, E. Paul Boyko, and Herb Schindler, to name a few. One phone call from him can cause a flood of letters and pens to you. The medical profession is not as well organized.

5. The word of his appointment is already out. He has invited other quacks to come to Alaska ("The Land of Medical Freedom") This plus the law that Pat Rodey pushed through a few yrs ago makes Alaska a set-up for more quackery. (The law that protects practitioners of experimental or alternative medicine from licensure action). Alaska could become a laughing-stock again - as it did when marijuana was legalized. (It was legal to possess it, but illegal to obtain it)

There are lots of others, but this should suffice for now. Please call if you want more details.

Best regards,

Donald R. Rogers, MD
921 W Klott Rd
ANC 99515

264-1171 wk
349-9104 hm

2/24/93

To All MEMBERS of the HESS COMMITTEE

We the undersigned strongly support the confirmation of the appointment of Robert Rowen, M.D. to the Alaska State Medical Board.

Alaskans need Dr. Rowen's voice to represent Alternative Medicine, and maintain their right of choice in medical care.

Alternative Medicine and Conventional Medicine co-exist and compliment one another in European, Asian, Oriental, and other medically advanced countries.

Therefore, we the undersigned, strongly urge you to confirm Dr. Rowen's appointment.

Thank you
Kathleen M. Bedner
2933 Lily St, Apt A
Anchorage, AK 99508 907/383-0593

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1. ~~Rudal O Tomson~~ 14121 Specking Anchorage 3450559

2. ~~J Leonard~~ PO Box 11-1354 Anchorage 345-4762

3. Deborah Foster 2331 Lake Otis Anchorage, Ak 274-5870

4. Philip Geiger PHILIP GEIGER 1330 E. HUFFMAN RD. #505 Anch AK 3453617

5. Esther Bombardier ESTHER BOMBARDIER 5740 E 172nd Anch ALASKA 99516 345-1089

6. Jacquelyn A. Koury Jacquelyn A. Koury 525 west Third Ave #104 Anch AK 99501 274-1901

7. LEANNE Flickinger (Tomson) 14121 Specking Anch 99515 345-0559

8. Roger K. Fuson Roger K. Fuson 2933 Lily St. #1 Anchorage, AK. 99508 333-0593

Tuek J. Hojas 3331 E. Huffman Anch, Ak 99516 345-2480

Marilyn Erickson 13001 BRAGAW ST. Anchorage, AK. 99516 345-0436

Carolina Erickson

Feb. 24, 93

To the members of the Hess Committee

We request your vote for the confirmation of Robert Rowen M.D. to the Alaska Medical Board. His work with alternative medicine provides an outlet for those of ~~use~~ us seeking medical assistance without drugs. We need to have many diverse representatives on the medical board to provide a system of checks and balances.

Thank you

Michelle L. McMullen R.D.H.

To the members of the Hess Committee

We suggest that Robert Rowen M.D. be a member of the Alaska Medical Board - We feel that his representation of alternative medicine is essential to maintain a balance for the health field in Alaska - Many of us respect conventional medicine, although we may not chose to utilize it - We feel the ~~me~~ need of his representation for those of us who use alternative medicine

Thank-you -
Bill D. Robb

F. RUSSELL MANUEL, M.D., MSc.

Nutritional Therapy General Practice Acupuncture Preventive Medicine Allergy Program

February 23, 1993

Re: Importance of Alternative Medicine
Representation on the Alaska State Medical Board

Dear Legislator,

I am a member of the Alaska State Medical Association (ASMA) as well as the American Medical Association (AMA) and the American Holistic Medical Association. I support the appointment of an alternative practitioner on the Medical Board. The right to choose is an inherent aspect of the American way of life, and is in danger of erosion in the medical world. As concerned citizens, I believe we must move to insure the right to select the form of health care that best suits each one of us.

American medicine does not have all of the answers. We reject standard safe and economical practices used in other countries because they do not conform to our version of "scientific" medicine. There is an art as well as a science to medicine which very often gets lost in the scientific shuffle. I have practiced medicine in 6 different countries over the past 35 years and have been a tenured professor in a medical school for 10 of those years. I know the limitations of what's called "scientific" medicine. A State Medical Board with a majority of mainstream physicians and one alternative medicine physician could monitor safe, innovative therapies.

Dr. Rowen is an experienced, well qualified physician with diplomas in family medicine as well as emergency medicine. He is only one member of the board and can easily be out voted by other members. He brings to the board a different perspective which needs to be heard and considered.

Some of the so called "unscientific" practices of Dr. Rowen are approved of and encouraged by governments and national medical associations in other countries. These procedures save substantial health care costs and suffering.

For example, acupuncture, a 5000 year old art of medicine is practiced in many countries of the world. In France, most hospitals have medical acupuncturists on their staff. Acupuncture is routinely used in French hospitals for post operative surgical patients to relieve pain. In Beijing, China, I saw pain free caesarian deliveries using only acupuncture. I studied and worked in a clinic in China where paraplegics were treated with acupuncture. They regained muscle

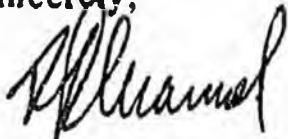
strength and sensation, and learned to walk again. This is unbelievable to American medicine.

The State Of Alaska has an opportunity at this time to become a leader in providing a broader range of medical services which are common in other countries but not yet accepted here. These could provide substantial savings and relief of suffering.

Our medical care system is in crisis. Changes in our health care system are very much needed now. Governor Hickel's appointment of a practitioner of alternative medical therapies assures that other views will be aired on the State Medical Board.

I support the appointment of Dr. Robert Rowen, M.D. to the Medical Board.

Sincerely,

A handwritten signature in cursive script, appearing to read "F. Russell Manuel".

F. Russell Manuel, M.D.

dba DELTA
THOMAS BOYLSTON WOOD
P. O. BOX 770014
EAGLE RIVER, AK 99577
(907) 694-9430

February 25, 1993

SENT BY FAX
SENATE 465-2069
HOUSE 465-2137

Alaska House of Representatives

Ms. Cynthia Toohey & Mr. Con Bundy, Co-Chairpersons, Health, Education and Social Services Committee

Alaska Senate

Mr. Steve Reiger, Chairperson, Health, Education and Social Services Committee

Juneau, Alaska

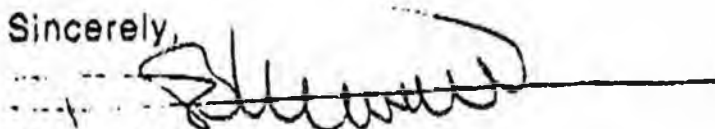
Subject: Doctor Rowen's Confirmation to the State Medical Board

To Whom It May Concern:

Support Doctor Robert Rowen's appointment to the Alaska State Medical Board. The Alaska State Medical Association (ASMA) is nothing more than a special interest group protecting their nefarious greed. All citizens are aware of the American Medical Association (AMA), pharmaceutical and other organized medical association continuing rape of the American people. The existing system just does not work for the citizens of this country. Mr. Rowen's enlightenment is analogous to both the individual who has now discovered after so many years that stomach ulcers may be caused by bacteria and the young Harvard graduate who has made a major breakthrough in AIDS research. The tunnel vision lauded by the AMA: "business as usual", just has not nor will it ever solve the crisis in the delivery of medical services to all Americans. New ideas and thinking is what is needed.

The charges by the ASMA of ethics violations by Doctor Rowen would be most amusing if it were not a mirror of how desperate and pitiful the Association has become. Doctor Rowen's ethics far surpass those of the entrenched medical establishment.

Sincerely,


Thomas B. Wood

LEO MODZINSKI, D.O.
Atlanta Medical Clinic
100 West State Street
P.O. Box 187
Atlanta, Mi 49709
(517) 785-4254
Fax (517) 785-2273

February 24, 1993

RE: Confirmation of Dr. Robert J. Rowen, M.D.
to Alaska State Board of Medicine

Dear Senator - Congressman:

This physician has insights into preventive medicine that can cut costs in this medically expensive environment. Please give this man a chance.

Conservative medicine has the ear of high priced specialists and high cost hospital procedure therapy. This can only change if you have the willingness to see another side of medicine which works. Remember the CBS Alternative Medicine Message? 34% of Americans opt for alternative care. They represent high income, educated patients but this is for everyone.

Sincerely,



Leo Modzinski, D.O.

LM/jh

TO WHOM IT MAY CONCERN:

I WISH TO ADD MY VOTE TO KEEP DR. R. ROWEN, M.D. ON THE STATE MEDICAL BOARD. I FEEL THAT THERE IS A NEED FOR THE KIND OF MEDICINE HE PRACTICES IN THIS CHANGING WORLD ENVIRONMENT. I BELIEVE HE IS AN EXCELLENT PHYSICIAN. HE OFFERS HIS PATIENTS A GREAT DEAL OF NUTRITIONAL COUNSELING. HE HAS HELPED COUNTLESS INDIVIDUALS CEASE SMOKING WITH ACUPUNCTURE. HIS USE OF CHELATION THERAPY HAS PRECLUDED THE USE OF OPEN HEART SURGERY, AND HIS USE OF OZONE THERAPY IN GANGRENOUS LIMBS HAS STOPPED AMPUTATION. DR. ROWEN WILL DO ALL HE CAN TO HELP STRENGTHEN A CANCER PATIENT'S LIFE.

WHILE I DO NOT FEEL THAT MODERN DOCTORS ARE ALL QUALKS OUT TO MAKE A BUCK OFF THE NEAREST LIVING BEING. I DO FEEL THAT REFORMS IN OUR SYSTEM ARE NEEDED. ALTERNATIVES TO CONVENTIONAL DRUGS AND SURGERIES NEED TO BE EXPLORED. TODAY'S RESEARCH HAS NOT BEEN ENOUGH.

THANKS FOR LISTENING.

Belinda Howe
BELINDA HOWE
P.O. BOX 243592
ANCHORAGE, AK 99524

SKOK COMMUNICATIONS

February 24, 1993

Senate/House HESS committees
State of Alaska

Re: Confirm Dr. Rowen to the state medical board

I'm writing to acknowledge the wisdom of Governor Hickel in naming Dr. Robert Rowen to the Alaska State Medical Board. Dr. Rowen represents an alternative health-care view that very much needs to be heard by all Alaskans. Specifically, he is an advocate of health maintenance, or sickness prevention, while most physicians consider themselves to be in the business of curing illness.

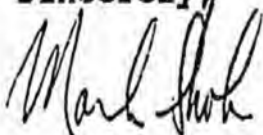
Dr. Rowen provides excellent counsel on how to prevent illness. Should sickness occur, he uses effective and economic -- if sometimes "unorthodox" -- treatments to help patients recover quickly.

As we look for ways to improve Alaskans' health and reduce rapidly increasing health-care costs, it behooves us to listen to practitioners such as Dr. Rowen.

Please support the voice of alternative health-care advocates by confirming Dr. Rowen to the state medical board.

Thank you,

Sincerely,



Mark Skok

Mary A. Sells
1600 Turpin
Anchorage Alaska 99504
24 February 1993

Dear Ladies and Gentlemen,

I support the appointment of Dr. Robert J. Rowen to the Medical Board. He has always made it clear that the patient, the person, is first and foremost.

As I understand it, the Medical Board is to serve the people, we the people. I have to wonder why the Establishment is so much against Dr. Rowen. Is it because he is so vocal in his support of the patients against unnecessary surgery and dangerous drugs?

The point really is not so much to support Dr. Rowen per se, but what he represents, that is, freedom of choice in medical care. He is an excellent Doctor, with sterling credentials. His therapies have hurt no one, as there are no dangerous side effects to this form of Medicine. So, who better to be among the first to be the voice of Progress and Freedom of Choice for all Alaskan Citizens?

Please vote in favor of confirmation. Please confirm Dr. Robert J. Rowen to the State Medical Board.

Thank You,

Mary Sells

February 23, 1993

Alaska Senate Health Committee
State Capitol, Juneau, Ak. 99801

Dear Senate Committee:

I'm writing this letter to support Dr. Robert Rowen's appointment to the Alaska State Medical Board.

We are so fortunate to live in Alaska, where we have the right to choose alternative medical care. We need Dr. Rowen on the board so all facets of medical care are well represented. You know, in Europe, all medical doctors prescribe homeopathics and herbs first, then, if necessary, they will prescribe antibiotics. Here, in America, our doctors prescribe antibiotics first, even if they are not necessary. I had a violent reaction to an antibiotic just last year, and even though I ended up in the hospital to treat the reaction, just a simple notation was made on my chart. There was no press or publicity.

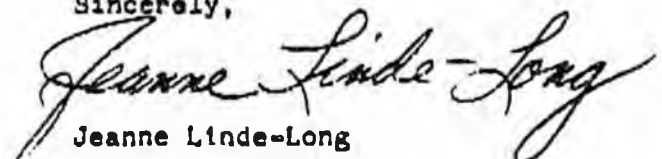
If an alternative doctor makes an error or causes a negative reaction, it is completely blown out of proportion, by the patient, the media, etc. It just isn't fair!

People must become educated and realize the importance of alternative medical care. I'm shocked by the ignorance and petty jealousias behind the group of people trying to remove Dr. Rowen from the medical Board.

I believe you received a copy of the letter I wrote to Governor Hickie about my mother, Helen Linde, being refused proper care at Providence Hospital because the doctor who sent her, was named Dr. Robert Rowen. Tell me, how would you feel if your mother was in the Emergency Room and the specialty doctors needed, refused to see her?

Just think about this letter, think about the word "freedom", and think about this state of Alaska. Also, think about this man, Dr. Robert Rowen; kind, empathetic, receptive, who was schooled in the finest medical schools, practised orthodox medicine and then went further in his search to benefit mankind. Dr. Rowen, in my judgement is a real pioneer and an asset to this wonderful state of Alaska.

Sincerely,



Jeanne Linde-Long
a 39 year resident

2/25/93

TO ALL Reps & Senators
FROM: Dr BRUCE KNIEGGE
7536 LAKE OTIS
ANCHORAGE AK 99507

PLEASE SAY "YES" in confirming
Dr Robert JAY ROWEN MD To the
Alaska State Board. We need the
input from all sides. Dr Rowen
will do a great JOB FOR OUR STATE.

Dr. Bruce A. Kniegge

February 24, 1993

To All Members of the HESS Committee:

I, along with many Alaskans, support Dr. Robert Rowen's confirmation to the Alaska Medical Board. I have worked with Dr. Rowen closely for eight years and know of his outstanding service and dedication toward improving the quality of health and the well-being of all Alaskans. He has traveled around the world seeking safe and effective healing therapies. He volunteers many hours of service for public health education throughout the State.

I ask you to confirm the appointment of Robert Rowen, M.D. to the Alaska State Medical Board.

Thank You,

Patsy Hayes, R.N.

Patsy Hayes, R.N.
3331 E. Huffman Road
Anchorage, AK 99516

TO: The H. E. S. S. Committee

FROM: Linda Neuls
12845 S. Bragaw St.
Anchorage, AK 99516-2906



DATE: February 24, 1993

SUBJECT: Dr. Robert Rowen's appointment to the medical board

As one of the voting citizens of the State of Alaska and a supporter of the freedom to seek the help of alternative medicine, I wish to express my desire that Dr. Rowen be confirmed on the State Medical Board.

Our son was born in this state thirteen years ago with a handicapping birth defect. He has received excellent care here by some talented physicians. So you can see, I am not "sour grapes" on traditional medicine. What I do feel, is that alternative medicine is misunderstood by doctors who are simply ignorant and perhaps even reticent to explore it. It is my feeling that the traditional docs who dare to stray too far from the fold experience the vehemence of their peers. This is sad because IT IS THE PATIENT WHO SUFFERS!

Because our son, Benjamin, had received YEARS of antibiotics daily (because the traditional docs knew of no other course), he developed severe symptoms. The symptoms were misdiagnosed and he was either prescribed more antibiotics or sent on his way hearing that nothing was wrong. We were at our wit's end literally! It was horrible on the family, not to mention how dreadful Benjamin must have felt! We then learned of alternative medicine by word of mouth through others who were marvelously helped. And, to make a long story short: we have Benjamin's health back to excellent, considering all the strikes against him genetically.

Applying rational, scientific knowledge, Dr. Rowen prescribed treatments which built back Benjamin's own immune system and reversed the problems caused by rounds of antibiotics. Thank goodness this doctor was not afraid to buck traditional dogma.

Dr. Rowen is an intelligent, reasonable man who truly has his patient's and ALL Alaskans' best interests at heart. He has my full support. It is unnerving for me personally to imagine how dreadful our lives would be should the medical monopoly be totally successful in their quest for power and the services of Robert Jay Rowen (and others like him) not available. I would applaud your courage and support, too!

12845 S. Bragaw St.
Anchorage, AK 99516

February 24, 1993

HESS Committee:

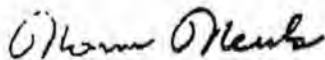
I am writing you as one a constituents to express my appreciation and support of Dr. Robert Rowen on the State Medical Board.

I am quite well aware that Dr. Rowen's advocacy of alternative medicine doesn't sit too well with the established medical community, but a person with new and different approaches may be what the status quo board needs.

For the past few years, my son who was born with a birth defect has been a patient of Dr. Rowen's and his general health has improved immensely. Prior to going to Dr. Rowen, Benjamin had been treated with the standard fare of traditional drugs and antibiotics which just seemed to stabilize or sustain his poor health.

As Alaskans I believe we are fortunate in a lot of ways to have choices in several areas of our lives and not to have to digest the standard fare doled out to citizens of other states. Therefore, I request that you give Dr. Rowen a fair shake when considering his type of medicine. Again, I support his appointment to the Medical Board--all citizens would benefit!

Norm Neuls



MURRAY L. BLACK, D.O.

OSTEOPATHIC PHYSICIAN AND SURGEON
GLENMOOR GREEN PROFESSIONAL CENTER
609 SOUTH 48th AVENUE
YAKIMA, WASHINGTON 98908

PHONE (509) 966-1780

February 24, 1993

FOR HESS CMTE

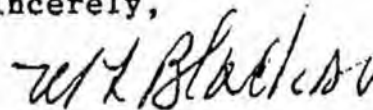
Senator Steve Rieger
State Capitol
Juneau, AK 99801-1182

Re: Confirmation of Robert J. Rowen, M.D.

Dear Senator Rieger,

If the Alaska Medical Association is against the confirmation of Dr. Rowen to sit on the Alaska State Medical Board, that should suggest to you he should be supported.

Sincerely,



Murray L. Black, D.O.

MLB/rh

FILE _____ JOHN PARKS TROWBRIDGE M.D.
DISCARD THE CENTER FOR HEALTH ENHANCEMENT

URGENT
ROUTINE

FAX TRANSMITTAL COVER LETTER [\OG\F\FAXCOVER] (06-91) (W/SSL)

DATE: 02-24-93 FROM: J Trowbridge MD

FAX: 713-540-4FAX (713-540-4329) TELEPHONE: 713/540-2329

SENDING FROM TOSHIBA 3700 FAX

PLEASE CALL 713/540-3223 OR 713/540-2329 IF PROBLEMS

For
HESS
CUNTE

Senator Rieger -

As the Alaska State Legislature takes up the nomination of ROBERT J. ROWEN MD to the Alaska State Medical Board, your vote could improve for years the health care of the people of Alaska.

Dr. Rowen has been a friend of mine for several years - I know firsthand that he is fair, reasonable, and honest. I know also that he is passionately committed to saving lives and restoring health - especially for those patients who have been told that "there is nothing else we can do for you" by all the doctors they have seen previously.

By putting Dr. Rowen on the Medical Board, you confirm that the State government wants to see fresh alternatives that preserve all the choices that help people feel better. Thanks!

PLEASE DELIVER IMMEDIATELY TO THE ATTENTION OF:

Senator Steve Rieger

COMPANY:

State Capitol, Juneau Alaska

TELEPHONE NUMBER:

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PAGE TOTAL (COVER INCLUDED): 1

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FAX NUMBER:

(1- 907) 465-2069

<<<<<<***

Leslie Medical Center
P.O. Box 400 • Leslie, Arkansas 72645
Melissa Taliaferro, M.D., Medical Director

February 24, 1993

RECEIVED FEB 24 1993

Senator Steve Ringwalt
State Capitol
Juneau, AK 99801-1182
For HESS CMTE

I support the appointment of Dr. Robert Rowen to the Alaskan State Medical Board.

Dr. Robert Rowen is a well known and respected physician member of the American College of Advancement of Medicine with whom I have been acquainted for many years. He would serve your state well, especially as a voice for the interests of the people before the Medical Board.

I hope you will confirm his appointment on March 1st.

Sincerely,

Melissa Taliaferro M.D.

Melissa Taliaferro, M.D.

MILWAUKEE PAIN CLINIC

WILLIAM J. FABER D.O.
Medical Director
Pain & Preventative Medicine

February 24, 1993

For HESS CLUTE
Senator Steve Rieger
State Capitol
Juneau, AK 99801-1182

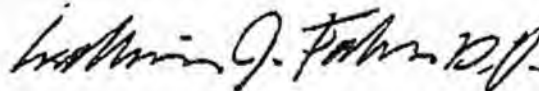
SENT VIA FAX to 907-465-2069

Dear Senator Rieger:

I have known Dr. Robert Rowen for nearly 10 years. He is an outstanding physician. His skills exceed the usual standard of care and his work in helping the body to heal itself without the use of drugs and surgery has been most impressive. He has treated me several times with excellent results. With his knowledge and skill he will certainly be an asset to the Alaska State Medical Board and the people of Alaska. As you are aware, there has been a lot of national press recently indicating that the American people want physicians with skills in more natural means as well as access to physicians using drugs and surgery.

I highly recommend Dr. Rowen; he puts the health and welfare of the patient first. I feel it is a privilege to know him.

Sincerely,



William J. Faber, D.O.

Jonathan Collin, M.D.

911 Tyler Street.

Port Townsend, WA 98368

(206) 385-4555

Feb. 23, 1993

FOR ~~HESS~~ CUTE
Senator Rick Halford
State Capitol
Juneau, AK 99801

FAX 907-465-4928

Dear Sen. Halford:

I am a colleague of Dr. Robert J. Rowen, M.D. and wholeheartedly recommend his appointment to the Alaska State Medical Board. Dr. Rowen and I share the common belief that there is an alternative to high-tech, expensive, medicine called preventive medicine which looks at nutrition and diet first and medication/surgery second.

Put someone on the board who is interested in bringing Alaska medicine with the same goals we are looking at in the Office of Alternative Medicine at the National Institutes of Health in Bethesda, MD.

I appreciate your support of Dr. Rowen.

Sincerely,

Jonathan Collin, M.D.

cc Senator Steve Rieger Fax 907-465-2069
Rep. Ramona Barnes FAX 907-465-4565
Rep. Con Bunde FAX 907-465-2137
Rep. Cynthia Toohy FAX 907-465-2 7

JAMES P. FRACKELTON, M.D.

Preventive Medicine & Exercise Cardiology

24700 CENTER RIDGE ROAD
CLEVELAND, OHIO 44145
Telephone (216) 835-0104
Fax (216) 871-1404

February 24, 1993

For HESS CMTE

Senator Steve Rieger
State Capitol
Juneau, Arkansas 99801-1182

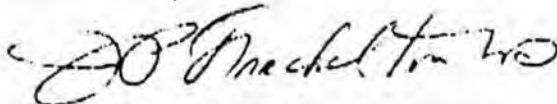
Dear Senator:

Alaska is indeed fortunate to have a candidate for the Alaskan Medical Board in the form of a forward thinking physician such as Robert J. Rowen, M.D.

You will find forces of standard crisis care medicine will oppose this nomination. If we are to avoid national bankruptcy, we must not give into the non-competitive status quo and move to the less expensive and more effective preventive approach of the 21st century.

Health care reform is our number one priority in the United States and it might as well start in your forward thinking state of Alaska.

Sincerely,



James P. Frackelton, M.D.
Past President - American College for Advancement in Medicine

JPF/mjs

FEBRUARY 23, 1993

TO: HESS COMMITTEE

FROM: JUDY COX
6261 E 41ST COURT
ANCHORAGE, ALASKA 99506

LADIES AND GENTLEMEN:

AS A CITIZEN OF THE STATE OF ALASKA, A VOTER, AND A CONCERNED CITIZEN I URGE YOU TO SUPPORT THE NOMINATION OF ROBERT J. ROWEN, M. D. TO THE STATE MEDICAL BOARD.

IT IS EVIDENT BY THE FIGHT BEING STAGED BY THE STATE MEDICAL SOCIETY THAT THEY FEAR DR. ROWEN'S APPOINTMENT. I HAVE WORKED FOR 28 YEARS IN MEDICINE AND I BELIEVE I KNOW FULL WELL WHAT IT IS THESE DOCTORS FEAR. DR. ROWEN HAS A VISION OF HOW MEDICINE CAN BE BETTER AND HOW PEOPLE CAN LEARN TO TAKE CARE OF THEMSELVES TO A GREATER DEGREE. HE IS INTERESTED IN NEW PROCEDURES AS WELL AS ENVIRONMENTAL MEDICINE AND DOES NOT ADVOCATE THE USE OF UNNECESSARY MEDICATIONS (CHEMICALS) AND SURGERIES.

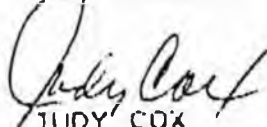
CONVENTIONAL MEDICINE IN THIS COUNTRY IS LARGE BUSINESS AT ITS WORST. CHEMICAL AND SURGICAL THERAPIES ARE NOT ALWAYS IN THE BEST INTEREST OF THE PATIENT BUT ARE CERTAINLY ALWAYS IN THE BEST INTEREST IN THE PHYSICIAN PROMOTING THEM.

PLEASE CONSIDER PLACING AT LEAST ONE PERSON ON THE MEDICAL BOARD WHO HAS A DIFFERENT OPINION, ONE PERSON WHO WOULD TELL THE TRUTH ABOUT THE MEDICAL MONOPOLY THAT WE AS CITIZENS MUST DEAL WITH.

IF DR. ROWEN IS WRONG IN HIS IDEAS THEN THE STATE MEDICAL SOCIETY HAS REALLY NOTHING TO FEAR. IF, HOWEVER, HE IS RIGHT THEN THE PEOPLE OF THIS STATE SHOULD HAVE ONE VOICE ON THEIR SIDE WHEN IT COMES TO THEIR HEALTH.

THANKS FOR YOUR ATTENTION.

SINCERELY,



JUDY COX

(907) 333-6363

Dear Ladies & Gentlemen

I am writing in support
of Dr. Bowen's confirmation to
the Alaska State Medical Board.

I feel we have the
right to choose our
medical care, not be told,
I also believe in my right
to take food supplements and
seek medical care of my
choice.

Thank you for your attention
to this important issue.

Sincerely
Joy Anderson
1644 W. Diamond Blvd
Anch., AK. 99502

OMNI MEDICAL CENTER

Robert Jay Rowen, M.D.
Diplomate, American Boards of
Family Practice, Emergency
Medicine, Chelation Therapy

"Biologic Alternatives to
Drugs and Surgery"

615 E. 82nd Street, Suite 300
Anchorage, Alaska 99518
(907) 344-7775

February 24, 1993

RECEIVED FEB 25 1993

Dear Legislator:

I have been advised by a member of your body that the Alaska State Medical Association (ASMA) is applying significant pressure on you to block my appointment to the State Medical Board. You received a letter, authored by Jennifer Christian, M.D., containing cleverly manipulated words that deliberately hide and disguise the truth and it was suggested that I answer the allegations.

I was criticized on several accounts, including deliberate misrepresentation, selective use of facts, being unethical, harming my patients, and others. Let's look at some of these.

She begins her letter by glorifying scientific medicine. Please read the enclosure carefully to see the truth in medicine in this country which she deliberately left out. Furthermore, she did not relate to you the following about so-called scientific medicine: 1) Bypass surgery has proven to be, not only dangerous but ineffective in three separate major scientific studies. 2) Chiropractic manipulation has been found to be the most cost-effective treatment for low back pain while back surgery has a 50% "make you worse" rate. 3) Allergy has been found to be the primary cause of ear infections and sinus disorders, not a deficiency of antibiotics or ear and sinus surgery. 4) The drug treatment of high cholesterol and high blood pressure often leads to worse complications than doing nothing. 5) The treatment of cancer with drugs, radiation, and surgery usually leads to worse complications than doing nothing. 6) The Arthritis Association has admitted that it has nothing to combat arthritis.

The list is endless. Yet we do not see the "scientific" pundits moving against the above. Has anyone of you asked why? Do you wonder why costs are skyrocketing?

Aside from the above, let's look at other selective use of facts. You were previously sent absolute proof that my presentation on mercury toxicity included documentation from a bonafide researcher working on a Ph.D. dissertation. This material was sent to virtually every doctor in the city, including Christian, prior to ASMA sending her letter. Without correcting their negligence, does not this amount to deliberate misrepresentation, and also perhaps libel? Furthermore, it is documented that Christian, herself, lied to the Anchorage Municipal Assembly when she testified to Assemblyman John Wood that she had no negative information on the deleterious effects of fluoride when he asked her why she did not provide such information with her promotional materials. In fact, she had the materials at least a week before. Yamiyanous' findings on the fluoride

Page Two

cancer connection were upheld as valid by two separate district courts (she left that out too!)

Allegations were made that I harm my patients. In fact, the one serious reaction she refers to was an acknowledged nursing error. It had nothing to do with the treatment itself. This was not only published in the newspapers as I am relating it to you, but investigated by the State Medical Board, which exonerated me. The Medical Union has attempted to solicit complaints from my patients, but to no avail. Is this practice ethical? Where are the other injuries she refers to? She did not balance by informing you of hundreds of complaints against their doctors, including one who left a scalpel in a knee.

In fact, the highest ethics of medicine call for "above all, do no harm". I have been in private practice since 1983. I can honestly say that with the exception of the above-mentioned nursing error, I do not know of a single patient who has been physically harmed through any of my practices or treatments. Furthermore, I had the honesty and integrity to inform the above-mentioned patient of the nursing error at the time that it happened. How many physicians can say they have always been so honest about errors or have such a record of no injury? They didn't tell you that iatrogenic (doctor caused) disease is the sixth leading cause of death in the country. Why do doctors have the reputation of burying their mistakes?

I am accused of being a snake oil peddler and unscientific. To the contrary, I have toiled countless hours and spent thousands of dollars traveling around the country and even overseas to bring back the latest scientific information of benefit to my patients. I subscribe to services which scour the world's medical and nutritional literature and provide me summaries. With little exception, everything I do in my office is quite scientifically based and documented, either in American or foreign literature. Does Christian's ignorance of the existence of this science make ME the one who is unethical? By their own stated ethics, do they not have a responsibility to seek out this information on behalf of their patients? Do they also not have a responsibility by their ethics to allow me to share this information with them? In fact, I have been totally ostracized and physicians have threatened to quit their organizations if I am scheduled to speak, even if attendance is not required. What kind of mindset are we dealing with here? Are we not witnessing a repeat of the Ignos Schmillweis scandal of the 1830's, when a man was destroyed by his peers for advocating hand washing?

In truth, most medical doctors study only journals funded by the drug cartel, which provides "scientific" articles on such therapies that are also funded by drug companies. It is well known how tainted such research can be and even doctors will admit that.

Christian did not tell you that ASMA makes science by "voting" on it. Her organization voted that it is irrational that mercury vapor is released and absorbed from amalgam fillings and it is only hypothetical that environmental agents have any deleterious effect on the immune system. This they did after volumes of information from hard basic science literature was presented to them on mercury, and even a common layman knows better about environmental toxins. In fact, orthodox medicine is trying to

Page Three

convince the soldiers returning from the oil fields of Desert Storm that their horrible illnesses are simply stress-related, or do not exist, and have said publicly in Anchorage that oxyfuels are not a problem (prior to the study proving the opposite). Was I unscientific if I diagnosed such before a study finally came out?

Christian did not tell you that she is under the direction of Dr. John Renner, the noted quackbuster who travels from state to state while funded by drug companies, to destroy dissent in medicine. Her use of tainted words in the letter, such as "unusual practitioners" model Renner's practices well-documented in a video tape made of his presentation to these individuals 3 years ago. I have a 480 page docket of memo's and speeches from his group, as well as government agencies, outlining collusion to destroy chiropractic and any alternatives to the drug monopoly.

This medical appointment is not about Robert Jay Rowen, M.D., but something far greater. When the controversy first broke, the governor's office received unbelievable numbers of public opinion messages in a favorable ratio of 6-1. They told me it had a higher favorable rating than any other issue they had seen. We have received countless letters from OUTSIDE praising the Alaska legislature for enacting the freedom of choice in medicine statute (3 years ago) and the governor for this appointment, a sample of which is enclosed.

When Congressman Claude Pepper introduced legislation to make vitamins into drugs, the Congress received more messages from the American people than any other single issue, with the exception of the Viet Nam war. Yet the feds and medical industry are still trying to deny the public health choices and freedoms. The true issue is the continuing saga of the industry propping up its failing system through continued federal and state regulatory protection. It is such protection that gave the drug and surgery industry the monopoly to begin with, to the exclusion of safe and effective treatments that neither cost much nor can be patented. Many books are written supporting this.

My appointment to the Medical Board is not a threat to ASMA or their system. I am only one vote out of seven and I have publicly stated that my interest is in sharing information on both sides of the fence for the betterment of our patients. Alone, I cannot make much of a difference, but the symbolic effect on the 33% of the American public (as published by the New England Journal of Medicine just last month) that seeks alternative medicine is major. Alternative medicine and nutrition has made the cover of USA Today, Time, Newsweek, and daily papers in the past several months. A five hour segment is appearing on PBS this week.

If after reading this letter, you have further questions, please contact me directly. I would be happy to provide you with verification of everything I have written. You might ask Christian if she can do the same. I have already sent you written proof that she cannot. Governor Hickel demonstrated that he could see through their ruthless attacks by making this appointment. He was also aware that I have repeatedly offered to publicly debate these individuals at any time and place and against the best of what they have to offer. Instead, they continue to attack me through letters, innuendo, and behind closed doors, which is not the honest

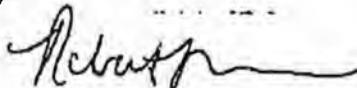
Page Four

or scientific way. Scientific ethics calls for an open exchange of information, not smearing with propaganda.

Many local medical doctors have privately contacted me with support for standing up to the medical union and monopoly. Yet they are terrified to speak out openly for fear of reprisals: Loss of referrals, hospital privileges, scorn and labeled a heretic, like myself. This appointment will do much to lessen their fear of straying from a "world is flat" mentality (lest we forget that many were burned at the stake for doing such). Please call Russ Hoffman, M.D., former president of ASMA, who now works at Bethel Hospital, for inside verification of my statements. Medical politics is far worse and dirty than public official politics!!

If after reviewing all the information, you still cannot find yourself to vote on behalf of the public's interest instead of the medical union's interest, I ask that you see the movie Lorenzo's Oil. The cry around the nation, "we want Lorenzo's Oil now!", has already begun.

Sincerely,



Robert Jay Rowen, M.D.

P.S. For years we "alternative" physicians were labeled unethical for acknowledging the existence of PMS, chronic fatigue, nutritional prevention of cancer, chemical sensitivities, etc., and providing treatment. All of a sudden the world has discovered these and many more are real. Were we the bad guys for helping these sufferers, or how should we look at the medical union for ignoring them, telling them they were just crazy, and loading them with psychoactive drugs?

Please note the enclosed letter about a patient who was refused consultation simply because she was my patient. The delay caused her bowel to become gangrenous resulting in an emergency colostomy which quickly lead to her demise.

RJR:msg

Enclosures

"IT HAS BEEN ESTIMATED THAT ONLY 10 TO 20 PERCENT OF ALL PROCEDURES CURRENTLY USED IN MEDICAL PRACTICE HAVE BEEN SHOWN TO BE EFFICACIOUS BY CONTROLLED TRIAL."

ASSESSING THE EFFICACY AND SAFETY
OF MEDICAL TECHNOLOGIES

Office of Technology Assessment
Publication #PB286-929, p.7, Sept. 1978

"AS USED IN THIS REPORT, A QUACK IS ANYONE WHO PROMOTES MEDICAL SCHEMES OR REMEDIES KNOWN TO BE FALSE OR WHICH ARE UNPROVEN, FOR A PROFIT."

Quackery A \$10 Billion Scandal
Comm. Pub. No.. 98-435, p.III
U.S. Government Printing Office
Washington, D.C., 1984

UNORTHODOX MEDICINE IS UNPROVEN BY THE ABOVE GOVERNMENT ASSESSMENT. BY THE SECOND GOVERNMENT STATEMENT, THEREFORE, ORTHODOX MEDICINE CAN BE QUACKERY. There cannot be a double standard of how we judge alternative medicine compared to orthodox medicine.

It has been said we are in medicine's Golden Age. Let's look at statistics:

1. The U.S.A. dropped from seventh to sixteenth in the prevention of infant mortality.
2. U.S.A. has dropped from sixth to eighth in female life expectancy.
3. U.S.A. has dropped from tenth to twenty-fourth in male life expectancy.
4. We have epidemics of hypertension, Alzheimer's disease, cardiovascular disease, cancer, non-AIDS immune disease, depression, anxiety, and other degenerative diseases.

We have bought this unbelievable trend by spending 11 percent of GNP on health, more than any other country on the face of the earth. Do we save lives? Ironically, the only time in recorded history the death rate fell was: 1) 1973 Israel - 50 percent drop. 2) 1976 Colombia - 35 percent drop. 3) 1978 Great Britain. All were during doctors' strikes of prolonged duration. . . In 1978, 1.5 million people in the U.S.A. were hospitalized due to drug side effects. A 1980 study determined 20 percent of all patients admitted to the hospital had 1 or more iatrogenic episodes. The estimate of deaths in the U.S.A. each year from prescription drugs is 140,000. That is a rate of 1 per 2,000 persons in this country and does not include other obvious morbidity. The number of deaths in 1983 due to vitamin therapy was 0. In fact, there are no reports of deaths due to vitamin therapy in several literature searches.

Were physicians who utilized Inderal for migraine headache before it was proven effective, or tricyclics for pain instead of anti-depression, or who have used and still use fluorides for osteoporosis (proven ineffective in a 1990 JAMA publication) to be considered quacks for using unproven therapies?

Let us not forget that up to 30 percent of all orthodox medical publications have recently been found to be fraudulent in the push to "publish or perish". Furthermore, we find one double blind study refuted by the next. If medicine were a science, this would not happen. The caveat of medicine is "Above all, do no harm". Can we say we have fulfilled this?

EDTA CHELATION ASSOCIATION OF BRITISH COLUMBIA

6262-A Fraser Street, Vancouver, B.C. V5W 3A1
(604) 327 3889



February 15, 1993

Robert Rowen, M.D.
Omni Medical Center
#300 - 615 East 82 Ave.
Anchorage, AK 99518

Dear Dr. Rowen;

Congratulations to you for your outstanding courage and unswerving determination to help make it safe in Alaska for doctors to practice alternative medicine such as chelation therapy.

Your special type of courage will not ever be forgotten as it will be recorded in the pages of history for all time.

We in British Columbia are fighting a similar battle for the same type of legislation that you and Governor Hickie gained for Alaska.

We are a lay group under the banner of the EDTA Chelation Association of B.C. registered as non-profit society in this province.

Preparations are under way for our first conference "HEALTH'O'RAMA 93 - FULL SPECTRUM HEALTH" to take place August 14 - 15, 1993 at the Hyatt Regency hotel in Vancouver, B.C., Canada.

Many medical doctors, scientists and researchers from Europe, the United States and Canada are coming together to focus the need for legislation to protect the right of medical doctors to practice and secure the right of patients to access alternative medicine without fear of harassment in British Columbia.

Our Association would be deeply honoured if you would accept our invitation to visit us and participate in our program as our guest along with Governor Hickie this August.

An early reply would be most appreciated as the final draft of our program is to be in print within 30 days.

Yours sincerely,

Croft Woodruff,
President

March 18, 1991

The Honorable
Walter J. Hickle
Governor of Alaska
Juneau, Alaska

Re: Helen M. Linde
Room 291
Providence Hospital

Dear Governor Hickle;

On Thursday, 3-14-91, my 76 year old mother consulted Dr. Robert Rowen for recent onset of constipation and nausea. Dr. Rowen appropriately ordered an x-ray confirming a twisted bowel obstruction. Very easy to fix, for a specialist, but life threatening if not fixed.

On Friday 3-15-91, my mother had a barium enema, x-ray at diagnostic imaging per Dr. Rowen's request. She became very ill after drinking the magnesium citrate for the x-rays and vomited all night and most of the next day. I was concerned about her fluids, so again we visited Rowen's clinic and she received a nutritional I.V. Dr. Rowen called all of the Gastroenterologists in Anchorage and they all said they were too busy to see her, and do the simple procedure to untwist the bowel. Dr. Rowen had no other choice but to send her to

the Providence Emergency room after he talked to Dr. Merchant who assured Dr. Rowen he would find a specialist for her. We arrived at Providence E.R. at approximately 4:00 P.M. on Friday, 3-15-91, and Dr. Merchant failed to secure a doctor. I asked Dr. Merchant, "Where is the gastroenterologist?" He told me that some were unavailable but that Dr. Bowers and Dr. Boyson had flatly refused to come see her. I cornered Dr. Merchant and asked him, "Why did the doctors refuse?" Merchant answered, "Because she is Dr. Rowen's patient & I was very angry!" Dr. Merchant said, "They have every right to refuse to see a patient!" I was livid! I told him "What about the Hippocratic oath?" Merchant said, "Look, don't take it out on me, I am in the middle and I'm tired of the petty politics these guys play." At 6:00 that day I finally obtained Dr. Nine, a vascular surgeon, to see my mother. He examined her and said, "This woman doesn't need surgery she needs a gastroenterologist." I told Nine that they had refused to see her because she was Dr. Rowen's patient. So he

told me he would call in Dr. Richard Farleigh on Monday. My mother was admitted but did not get to her room until 11:00 P.M. All that time she languished in the ER, ... WAITING.

Governor Nickle, will you please order an investigation of this negligence and human atrocity and please give us a medical board that protects the patients and public instead of these arrogant doctors

The unnecessary delay has caused unnecessary emergency room waiting time expense and threatens her health, as it may still force a surgery when a non-invasive colonoscope would have worked.

To date, she is still in Providence hospital under Dr. Nine's care. Dr. Nine did call Dr. Richard Farleigh and we are waiting to see him today. If gastroenterologists in Anchorage will see her, I have no choice but to take her outside. ... My mother will not be subject to exploratory surgery simply because the specialists here refuse to see her.

We live in Fairbanks and are 37 year residents of this state. I sincerely hope something can be done here, so she is not subjected to further delay and discomfort.

Thank you!

Sincerely,

Jeanne H. Long, daughter

February 27th, 1993

Senate HESS Committee
ATTN: Hon. S. Rieger, Chmn
State Capitol
Juneau, Alaska 99801-4182

Dear Mr. Chairman,

The State Of Alaska must modify its' current, narrow view concerning the regulation of medical treatment for its citizens.

Many other states are now recognizing the viability of alternative medicine as a positive force in the effective treatment of physical ailments.

I urge your Committee to approve the recommendation for appointment of Dr. R. Rowan.

He is well qualified in all respects and his appointment will bring a new view to the regulation of medicine that will benefit all Alaskans.

My wife, Marsa sends her thanks for your response to her message earlier this week.

Yours truly,

JEROME J. LEXER
4920 Byrd Lane
Anchorage, Alaska 99515-1050

cc: Gov W. J. Hickel

14291 Jarvi Drive
Anchorage, AK 99515
March 1, 1993

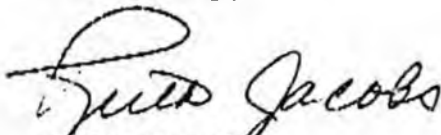
Alaska State Senate HESS
Juneau, Alaska
Fax: 465-2069

Dear Committe Members:

I would like to voice support for the confirmation of
Dr. Robert Jay Rowen to the Alaska State Medical Board.

Our nation was built on the right to have choices and
different views of opinion. Preventative measures and
natural means to healing have been effective health choices
far longer than modern day drug medicines. We need all the
information available to us including the latest drug
techniques and ancient wisdom. We need to take advantage of
all the best from all our sources.

Sincerely,


Ruth Jacobs

26 FEB 93

TO: HESS COMMITTEE

We the undersigned would like to express our strong support for the confirmation of Dr. Robert J. Bowen to the State Medical Board.

He has been unfairly criticized by the Medical community.

We personally know him to adhere to the strictest intellectual standards.

This appointment would benefit the entire state.

John D. Walsh DDS

Angela Harris

Lela Keeton

Marie Lorenz

J O A N C. P R I E S T L E Y, M D

Senate HESS Committee members
State Capitol
Juneau, AK 99801-1162

February 26, 1993

Dear Senate HESS Committee members:

I am writing this letter to let you know that I strongly support the nomination of Dr. Robert Rowen to the Alaska State Medical Board. I am familiar with his work and have enormous respect for both his philosophy and his effective medical treatments.

Your vote for Dr. Rowen will demonstrate your support for adding innovative and diverse viewpoints to the State Medical Board. I urge you to support the confirmation of Dr. Rowen. Thank you for your attention to my request.

Sincerely,

Joan C. Priestley MD
Joan C. Priestley M.D.

Center for 21st Century Medicine

7080 Hollywood Blvd, Suite 603, Los Angeles, CA 90028 • (213) 957-4210 • FAX (213) 957-0377

Date: 2/27/1993

TO ALL LEGISLATORS, COMMITTEE MEMBERS, AND BOARDS CONCERNED WITH HEALTH CARE AND WELLNESS:

The need is very great for medical practices and healthcare programs to be freed from exclusive use of prescriptive drugs and surgeries for healing patients and all of humanity.

There is an enormous demand for alternative medical care such as the use of natural remedies, healing thru touch, color, sound, thinking healthy, acupuncture, massage, and meditation. Consciousnesses that heal come in large part from within. We each heal ourselves.

It is our inalienable right to have the opportunity to have such alternative care and to also have representation and support from government, insurance companies and others for these extremely valuable alternative medical practices. People can be healed by counselling, sound, color, crystals, various other limitless and timeless ways by harmonizing with natural substances, natural laws, and universal intuitive knowledge.

Dr. Robert Rowan is a person who understands giving people more choices in healing practices that are non-intrusive, natural, and responsive to the patient. The patient has to be a part of the medical treatment in a very inclusive way.

Hospitals are often very sick places and many traditional indifferent doctors have killed with drugs and surgeries.

Ever increasing numbers of people want to take the responsibility of their lives and want alternative medical practices to be fully available to themselves and to the public.

Please allow us representation on the medical boards and committees.

Maintenance and prevention and deep understanding ^{of} patient heal thysel should be major focuses of medical practices.

^{YOU}
Thank for consideration of the whole and the wholistic approach to mind, body, and spirit.

Esther Bungardner

Former high school teacher, Alaskan for 32 years, counsellor, realtor

5740 E. 172nd Street, Anchorage, Alaska 99516 (907) 345-1089

LEGISLATIVE MEMBERS
ALASKA 1993 LEGISLATE

FREEDOM OF CHOICE IS A VERY IMPORTANT AMERICAN RIGHT. THE PEOPLE OF ALASKA NEED YOUR COURAGE IN SUPPORTING DR.ROWEN'S APPOINTMENT TO THE ALASKA STATE MEDICAL BOARD.

DR.ROWEN IS AN EXTREMELY INTELLIGENT, CARING, PROFESSIONAL MAN. HE HAS ALWAYS TRIED TO LEARN NEW METHODS TO SUPPORT AND IMPROVE HUMAN LIFE. HE HAS USED HIMSELF AS THE GUINEA PIG TO TEST NEW METHODS AND DRUGS. HE IS EXTREMELY WILLING TO SHARE HIS KNOWLEDGE WITH ANYONE WHO IS WILLING TO LEARN.

HE IS WILLING TO TREAT AIDS PATIENTS. AIDS IS GOING TO BECOME A CRITICAL EPIDEMIC IF A CURE IS NOT FOUND SOON. BY THE TURN OF THE CENTURY, IT IS ESTIMATED IT WILL EFFECT 3 OUT OF EVERY 4 PEOPLE. THIS MEANS YOU AND I WILL BE OR HAVE A LOVED ONE SUFFERING OR DEAD FROM THIS DREADED DISEASE. PLEASE DO NOT LET THE MEDICAL PROFESSION CONFUSE US ANY LONGER.
PLEASE, PLEASE, PLEASE SUPPORT DR. ROWEN.

THANKS YOU,
KATHLEEN JAMES (REGISTERED MEDICAL TECHNOLOGIST)
2812 LEIGHTON
ANCHORAGE, AK 99517

February 26, 1993

Alaskan Legislators,

We would like you to consider voting to put Dr. Robert Rowen on the State Medical Disciplinary Board. Please read the attached information so you can understand why it is necessary for you to vote for Dr. Rowen. This will be a vote for those of us who need representation and who use alternative medical care.

Sincerely,

Mary Nelson
2607 Eagle St.
Anchorage, AK
99503

Elisabeth Smith
P.O. Box 32494
Juneau, AK
99803

RECEIVED MAR 3 1993

DR. JACOBS' ALTERNATIVE MISSION



Jacobs, amid reams of study proposals




A new NIH office will put unconventional medicine to the test

By ANASTASIA TOUFEXIS

"A teenage Navajo mother in blue jeans would come in with a baby who was suffering from a cold and ask for some medication," recalls Dr. Joe Jacobs, summoning up a scene from his days at the Indian Medical Center in Gallup, New Mexico. "She'd be accompanied by the grandmother in traditional hoop skirt, who kept silent." After examining the child, Jacobs would offer his prescription for soothing inflamed nasal passages: boil some sage leaves in water and have the youngster inhale the aromatic fumes. "When she'd hear that, the young mother invariably would give the grandmother a sheepish smile. It was just what the older woman had been urging her to do, and they'd been arguing about it."

Jacobs has a healthy respect for grandmothers' folk remedies and for unconventional therapies in general. He comes by it naturally. For though he is a conventionally trained pediatrician, he is also the son of a part-Cherokee father and full-blooded Mohawk mother, who used to break out the herbs and tonics whenever he and his two brothers and sister had a fever or bellyache. "There would always be long-necked bottles filled with liquids sitting on a shelf in the closet, and a few bags of dried leaves—turtle socks and other things—that could be brewed into foul-tasting teas." At the same time, Jacobs continues, "my mother recognized that more serious illnesses needed a regular physician."

That unusually broad experience led officials at the National Institutes of Health to pick Jacobs to head their new Office of Alternative Medicine. The office was created last year under pressure from

Holistic Sampler		Does it work?
Chiropractic		Manipulating the spine to relieve back problems and other ailments. <i>Proved effective for relieving lower back pain.</i>
Acupuncture		A 2,000-year-old Chinese method of inserting fine needles into designated points on the body that relate to specific organs and body functions. <i>Effective for chronic pain and addictions; it even works on animals.</i>
Biofeedback		Using a machine that measures skin temperature and electrical response, a patient learns to control such involuntary functions as circulation, jaw tension and heartbeat. <i>Effective for chronic pain, migraines, Raynaud's disease (icy cold fingertips), drug addictions.</i>
Homeopathic medicine		Treating disease with tiny doses of natural substances that in larger amounts would cause the same symptoms as the ailment. <i>Pooh-poohed by U.S. doctors but found in European studies to be useful for influenza, headaches and allergies.</i>
Reflexology		Manipulating areas of the feet to affect the rest of the body. <i>Feels great, but no evidence that it works.</i>

Note: Not every technique will be investigated by Jacobs' new office.

a Congress alarmed by the soaring costs of high-tech healing and the frustrating fact that so many ailments—AIDS, cancer, arthritis, back pain—have yet to yield to standard medicine. In the breach, Americans have turned with growing enthusiasm to an array of unorthodox remedies, including hypnosis, biofeedback, homeopathy, acupuncture and herbs. According to the *New England Journal of Medicine*, a third of the population today consults al-

ternative healers, shelling out nearly \$14 billion a year for their services. Most is paid out of pocket, since such treatments are rarely covered by insurance. "They could be just as good, cheaper and safer than many of the drugs and treatments we now use," asserts Jacobs, 46, "but they're still unproven."

To alternative healers, the effort is welcome news. "While a few worry that it's a plan to trap and discredit them, most look

at this as a chance to be vindicated after years of being called lunatics," says Jacobs. The medical community has been cooler. Though the office's \$2 million appropriation is a pittance in NIH's overall annual budget of more than \$10 billion, critics resent that any sum is being diverted from traditional research. Some carp that the office will be a refuge for quacks—a charge

Jacobs flatly denies. "We're not created to rubber-stamp questionable practices."

With an M.D. from Yale and an M.B.A. from Wharton, Jacobs is a bona fide member of the Establishment. At the same time, his heritage has given him an outsider's perspective. Born in Brooklyn, New York, Jacobs spent part of his youth on Mohawk reservations upstate and in Can-

ada, where "I was criticized by relatives and friends for being too educated." But he also lived in Anglo communities in New York and New Jersey, where "I was often the darkest-skinned child in my class."

Among his most piercing memories is watching his fellow Boy Scouts being inducted into the Order of the Arrow. "There I was, the only real Indian, and they were dancing around the campfire in loincloths," he recalls. "It was both ironic and offensive." To fit in, Jacobs largely rejected his Indian background during his adolescent years. Today, however, the Connecticut home he shares with two children and his art historian wife Mary Jane Clark ("a full-blooded Wasp," he notes) boasts a room filled with Indian keepsakes. The family will soon be relocating to the Washington area, where Clark will find an old schoolmate: her dorm counselor at Wellesley, Hillary Rodham Clinton.

Jacobs is already spending his weeks at the NIH campus. With a staff that includes a pharmacist, an immunologist and a psychologist, he is crafting standards for the 10 two-year research projects the office plans to fund at \$100,000 each. Jacobs expects to steer clear of alternative therapies already being studied by other NIH departments, including the use of transcendental meditation for cardiovascular disease and acupuncture for substance abuse. "We may look at touch therapy, which is said to make patients better quicker," he says. "Or homeopathy, to relieve allergies, bronchitis or insomnia." He is also intrigued by wood ear, a tree fungus used in making *moo shu* pork, which is supposed to be a great blood thinner.

Treatments for cancer and AIDS are also high on his list. One healer, for example, claims to have isolated a substance in urine that turns tumor cells back to normal. The new office might also look into a faddish AIDS therapy that has patients paying up to \$20,000 to be hooked up to dialysis-like machines that pump ozone into the bloodstream.

To evaluate such remedies, Jacobs will rely on both standard trials and an increasingly popular research technique: analyzing the outcome of differing therapies in matched groups of patients. Such a study, he explains, might compare the effects of bee pollen with conventional antihistamines in treating allergies. Since alternative healers are new to scientific studies, the office will take steps to monitor the validity of records and results. At a minimum, Jacobs hopes to provide a service to consumers. At best, he says, "we may help promote a revolution in thinking among practitioners and researchers. It's a bold new venture, sort of like being on the starship *Enterprise*. We're going where no one has gone before." ■

MIND OVER MALADY

BILL MOYERS THE TALK USED TO BE CONFINED TO NEW-AGE BOOKSTORES, health-food shops and holistic magazines printed on whole-grain paper. But alternative medicine has now gone slickly mainstream: the subject of TV talk shows, best sellers and even an Oscar-nominated film, *Lorenzo's Oil*. This veritable flowering—or plague—of holism is almost always presented with wide-eyed enthusiasm and a hefty dose of conventional-medicine bashing. Critics of alternative healing are just as narrow-minded: these therapies are unscientific, they say, and therefore cannot work.

Bill Moyers avoids both extremes in a five-part PBS series premiering this week called *Healing and the Mind* and in a companion book that has already hit the best-seller lists. Level-headed, curious and skeptical, Moyers is the perfect tour guide. His question: Are our emotional lives entirely separate from our physical lives, or can one affect the other? To some degree, the latter is obviously true. Under mental stress, the heart rate climbs, and muscles tense. Conversely, breathing deeply and relaxing muscles can calm the mind.

But in five forays into different aspects of the mind-body problem, Moyers presents convincing evidence that the link between psyche and soma is more intimate and profound. The first episode takes place in China, where Moyers is guided through that country's ancient medical traditions by Dr. David Eisenberg, who studied there in the 1970s. Herbalists, acupuncturists and massage therapists all tell of the mysterious mental-physical energy known as *qi* (pronounced chee), which pervades both mind and body and is the basis for good health.

Moyers then repairs to the U.S. for the rest of the series. His first stop is with doctors who study the biology of emotion. Using Method actors to portray extreme anger and fear, the researchers show that even these artificially conjured emotions produce telltale changes in blood chemistry.

Moyers also visits U.S. hospitals in which non-traditional therapies have taken hold, including one in Massachusetts where Buddhist meditation is part of the regimen for patients with intractable pain. He winds up at Commonweal, a retreat in California where terminal cancer patients seek relief from the anguish that comes with their illness. They learn, says Moyers, "that healing is possible even when a cure is not."

Moyers asks the questions we would probably ask. When a biochemist states that the mind resides throughout the body, his eyebrows go up. "You don't mean that my big toe can feel sad, do you?" Moyers asks. The biochemist does, and what's more, her reasoning makes sense. When a Chinese pharmacist shows Moyers dried scorpions and lizards used to make curative tea, he wants to know how it works but also how it tastes. Answer: really awful.

That is not to say Moyers is never taken in. He is amazed that a woman can undergo brain surgery with acupuncture, perhaps not realizing that Western doctors have long recognized that the method can be as effective as chemical anesthetics. But in the end, Moyers presents a convincing case that conventional medicine still has much to learn. ■



Moyers and Eisenberg examine a dried lizard used to brew curative tea



Statement of Support for Dr. Robert Jay Rowen

To: Senators and Representatives

Return this to:
Alternative Medicine Advocates
200 W. 34TH #988
Anchorage, Ak 99503
(907 - 278 - 9911)

Your signature in support of Dr. Rowen's appointment to the Alaska State Medical Board will be greatly appreciated and you will be serving the interests of many who have voted for you.

We, the undersigned, support the appointment of Dr. Robert Jay Rowen to the Alaska State Medical Board. The diversity of alternative and complementary medicine is a valuable asset to the entire medical profession and will bring a fresh approach to the board as well as fair representation for the public's benefit and interests. We need to have the right to choose the health care that is best for us. In addition, alternative and complementary treatments can reduce the overall costs of health care.

Name: PLEASE Print & Sign	Residential Address	ZIP Code	Phone #	District
RAY ROELFS	761 Colonial Dr Wasilla	99654	373-6932	
IRA E. WALKER, III	4130 Box 5199 Wasilla	99654	376-2639	
GAIL S. WILSON-Phillips	4960 Hwy Drive Wasilla	99654	373-1070	
GARY F. MOORE	P.O. Box 872533	99687	376-8274	
GARY L. McMichael	1551 Middle Mesa - Palmer	99645	745-9274	
Philip J. Wilkes	1660 Centurian Pl #3 Wasilla	99654	373-1175	

This statement of support will be copied and sent to each legislator & to Governor Wally Nickel.

Thomas Chiropractic Clinic

1451 EAST PARKS HIGHWAY, #C
WASILLA, ALASKA 99654
(907) 376-2600

DR. JOHN W. THOMAS, JR.

FAX (907) 376-1196

F A X T R A N S M I T T A L S H E E T

DATE 1 March 1993 COVER SHEET + 1 SHEETS TO BE RECEIVED

TO SENATE & HOUSE CONFIRMATION @# 465-2069
HEARINGS FOR Medical Board

FROM Dr. Thomas @# 907-376-1196

MESSAGE: THIS IS MY STATEMENT OF SUPPORT FOR CONFIRMATION OF
ROBERT J. ROWEN, M.D., PLEASE VOTE TO CONFIRM HIS APPOINTMENT
TO THE STATE MEDICAL BOARD.

AS A HEALTH CARE PROFESSIONAL AND AS A PRIVATE CITEZEN-VOTER, I
BELIEVE DR. ROWEN'S CREATIVE PERSPECTIVE ON HEALTH CARE WILL BE
A POSITIVE ELEMENT IN AN AREA THAT NEEDS SERIOUS ATTENTION AT
ALL LEVELS.

John W. Thomas, Jr. D.C.
John W. Thomas, Jr., D.C.

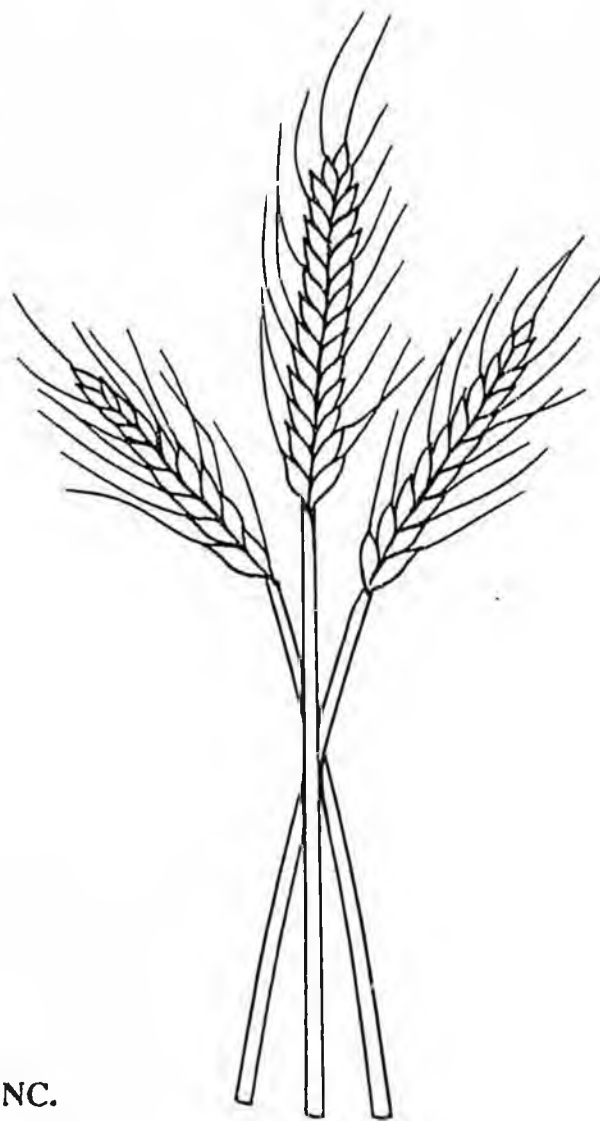
PS: attached find copy of more signatures in support of above.

PLEASE CONTACT US AT (907) 376-0431 IF THERE IS A PROBLEM WITH THE
TRANSMITTAL OF INFORMATION. THANK YOU.

Nutritional Influences on Illness

A Sourcebook of Clinical Research

Melvyn R. Werbach, M.D.
Assistant Clinical Professor
School of Medicine, UCLA
Los Angeles, California



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by James P. Carter, M.D., Dr. P.H.

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Medical Hypotheses (1988) 27, 41-49
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EDTA Chelation Therapy in Chronic Degenerative Disease

EFRAIN OLSZEWER* and JAMES P. CARTER†

*Clinical Cardiologist, Hyperbaric Oxygen Clinic, Sao Paulo, Brazil CEP04503. Chief of Nutrition Section, Tulane University, School of Public Health & Tropical Medicine, New Orleans, LA, USA 70112

Abstract — A retrospective analysis of treatment results from 2870 patients, with various chronic degenerative and age-associated diseases, who were treated with di-sodium magnesium EDTA chelation therapy, suggests that the case against EDTA Chelation Therapy should be re-opened.

Using qualitative but never-the-less standardized criteria for improvement, our analysis shows that EDTA Chelation Therapy resulted in "marked" improvement in 76.89% and "good" improvement in 16.56% of patients with ischemic heart disease; also, "marked" improvement in 91% and "good" improvement in 7.6% of patients with peripheral vascular disease and intermittent claudication. In a group of patients with cerebro-vascular and other degenerative cerebral diseases, 24% had "marked" improvement, and 30% had "good" improvement. Of four patients with scleroderma, three had "marked" improvement and one had "good" improvement. Seventy-five percent of all of the patients had "marked" improvement in "geriatric symptomatology of vascular origin".

The authors recommend renewed study of EDTA Chelation Therapy. The possibility of a "tomato effect", i.e., a drug which works, but the majority of physicians believe that it doesn't work, needs to be ruled out. A favorable climate needs to be created, in which FDA-approved studies of its usefulness in treating peripheral vascular disease can take place.

Introduction

E.D.T.A. are the initials for a chemical compound, ethylene diamine tetraacetic acid, which has properties of binding metals such as lead, iron, copper, and calcium, in that approximate order of affinity. It was first used in the United States in 1950, for the treatment of

patients with lead poisoning by Martin Rubin et al, who treated workers suffering from lead intoxication in a Michigan battery factory.

When treating a patient with lead poisoning, who, coincidentally, also had coronary artery disease and angina pectoris, Norman E. Clarke observed, that the patient's symptoms of angina

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It is an unstable substance, with a short half-life, and it is highly dangerous for tissue and cellular membrane components, outer, nuclear, ribosome, mitochondria, etc.) (14).

Three kinds of free radicals have been identified:

- Superoxides:-inhibited by superoxide dismutase
- Lipid peroxides:-inhibited by glutathione-peroxidase
- Hydroxyl radicals:-not inhibited by any organic enzymes.

Iron and copper both increase the rate of lipid peroxidation, by one million fold, thereby speeding up the rate of this component of the aging process. EDTA removes both iron and copper, the principal catalysts for this reaction. It has a greater affinity for these metals, than it does for calcium.

To create free radicals, we need endogenous enzymes; one of these enzymes related to the ischemic process is xanthine-oxidase. It is also involved in uric acid metabolism. To create free radicals, this enzyme also needs the catalysts, iron and copper. When we remove these metal ions, we reduce the enzymatic activity and inhibit free radical production.

Various studies show that when anti-oxidants are used, we can decrease free radical production, and increase tissue regeneration in chronic degenerative disease, aging, and in ischemic tissues (13). EDTA and other agents which remove calcium, or block the calcium channel, such as Verapamil, can also prevent atherosclerosis, in spite of the fact that they do not lower abnormally high blood lipid levels (16, 17). Laboratory research at the Cleveland Clinic has also demonstrated that EDTA can prevent LDL from becoming cytotoxic in vitro (18).

Zechmeister's animal data suggests that EDTA removes 80% of calcium in the wall of the aorta, and 20% of the calcium in the atherosclerotic plaque (7), and that chelation therapy has a decalcifying effect. EDTA produces a physiological hypocalcemia, thereby stimulating production of parathormone which removes calcium from the tissues, including bone, and puts it into the bloodstream, principally the calcium from pathological deposits such as in intra-cellular calcification (7, 8). Actually we know that most (80%) of the atheromatous plaque is not calcified, and the greatest risk is to ulcerate or cause a necrosis of the plaque, causing platelets to stick, with a release of arach-

idonic acid and thromboxane A₂, resulting in a thrombus "in situ", or worse, an embolus (6, 13, 23). Other studies (13) since 1950, also suggest that free radicals are related to chronic degenerative diseases, aging, and to the development of ischemic tissues.

Methods

The patients reported in this paper were treated at a private clinic, Clinica Tuffik Mattar, in Sao Paulo, Brazil, between May, 1983 and September, 1985. A total of 2870 patients were treated during that time-frame. 54% (1550) were women and 46% (1320) were men. They were treated with approximately 81 000 intravenous infusions of EDTA. The protocol used was developed by the American Academy of Medical Preventives: 50 milligrams of EDTA per kilogram of body weight were given in a IV infusion over 3-31/2 hours, to which had been added vitamins C, B complex, and magnesium, for a total of 20-40 treatments. We lost contact with 120 patients, who were not included in this study.

Treatments were given 2-3 times weekly. The patients were also given orally combined multi-vitamin, mineral, and trace element preparations. They were encouraged to change their eating habits, by reducing their consumption of total fat, especially saturated fat, and also by reducing their consumption of salt and sugar. They were also encouraged to increase their physical activity and to engage in a regular exercise program.

The patients were classified into the following vascular and degenerative disease categories:

- I. Cardiac Disease: 29.4% (844)
- II. Peripheral Vascular Disease: 39.4% (1130)
- III. Cerebro-Vascular & Degenerative CNS Disease: 17.7% (504)
- IV. Scleroderma: 0.1% (4)
- V. Other Geriatric Vascular Diseases: 13.4% (384)

Results

The system of evaluation of observed clinical response in patients with coronary artery disease and angina pectoris was as follows:

1. — A patient whose stress test was previously positive and became negative, and who was previously symptomatic, and became asymptomatic, while off all drugs, after

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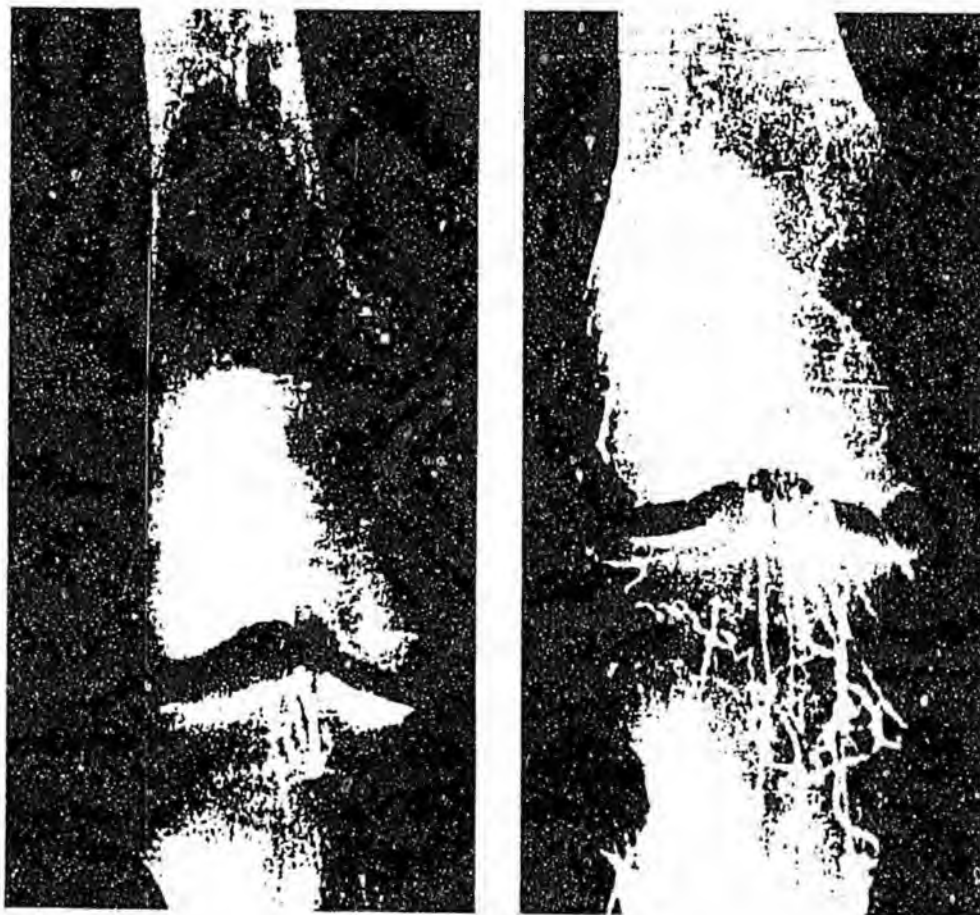
meister et al, in Czechoslovakia are most relevant for an interpretation of the clinical results seen in this study.

In one study (11), the authors induced experimental calcification of the aorta in 11 rabbits with a single dose of dihydrotachysterol administered by a stomach tube. From the fourth day of the experiment, the animals were given glucagon 0.1 mg + 125 mg EDTA IV for 10 days. 3 rabbits served as controls.

Glucagon alone removed the lipid inclusions from the wall of the aorta, but did not significantly affect the calcium deposits in the subintimal layers of the media. The combined administration of glucagon and EDTA removed most of the calcium and the lipids. Only negligible residues of these substances remained in

the wall of the aorta under the electron microscope. Quantitative examination showed that the calcium content of the wall of the aorta, dropped 32 times, compared with a sclerosed vessel where calcification had been chemically induced.

Brucknerova and Malinovska, also from Czechoslovakia, conducted the first clinical trials in humans, combining treatment with EDTA and glucagon in ischemic disease of the lower extremities (15). Two patients with hyperlipidemia (Fredrickson Type IV) and ischemic disease of the lower extremities received the above combined treatment with EDTA, 3 gms per infusion, up to a total dose of 90 gms, and glucagon, in a daily dose of 0.5 to 1 mg, up to a total dose of 20 mg. There was a marked development of collaterals, distal to the occluded



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This delayed effect of EDTA has been noted by others. The results of this study received widespread coverage in the news media, but were never published in a peer-reviewed journal. Furthermore, the press release stated that "EDTA was no better than a placebo", without mentioning that "the placebo" in this case, was Thiemann Pharmaceutical's very own Fludilat.

By way of comparison, in the study which resulted in FDA approval of pentoxifylline (Trental) for the treatment of intermittent claudication in chronic occlusive arterial disease, an increase in distanced walked of 25% over baseline, was accepted as clinically relevant. At each visit throughout the study, the proportion of patients with this degree of benefit was greater in the pentoxifylline group than in the placebo group. At the end of treatment, 26 (62%) of the 42 pentoxifylline patients met or exceeded this level of improvement. Among the 40 placebo patients, only 6 (15%) showed an increase of a 100% or more for distance walked. There is a pronounced placebo effect when treating claudication, and there is also the influence of training with repeated exercise on the treadmill which also results in improvement. The placebo effect, however, is rarely, if ever, greater than 33%. Nevertheless, patients randomized to pentoxifylline showed almost twice the improvement in distance walked from the values obtained at baseline, in comparison with the placebo patients [$p = 0.016$] (24).

Tables 1, 2, and 3 show a comparison between the recently gathered Brazilian data and the American data obtained by Dr. Norman Clarke et al from 1956 to 1980. In the case of peripheral vascular disease, 91.15% of the patients with intermittent claudication in the Brazilian study showed a marked improvement; 74.19% with intermittent claudication in the American study showed a marked improvement. See Table 1.

In the treatment of coronary artery disease, the mortality rate in 2 years in the American study with conventional medical treatment was 23.6%, and with treatment with EDTA, it was 13%. In the Brazilian study, treatment with EDTA resulted in a 2 year mortality rate of 0.2%. Also, 87% of the patients with coronary artery disease in the American study showed a marked improvement; 76.89% of the patients in the Brazilian study with coronary artery disease showed a marked improvement. See Table 2.

In the case of cerebro-vascular accidents, a numerical comparison between the American study and the Brazilian study cannot be made. In the American study, only patients with vertigo had an excellent improvement. This type of patient was classified as other "Geriatric Vascular Pathology" in the Brazilian study. The majority of cerebro vascular accident patients in both studies got a good, but not an excellent, improvement. See Table 3.

In any case, the much larger number of

Table 1 Comparison Between the American and Brazilian Studies on the Effectiveness of EDTA Treatment of Patients with Intermittent Claudication

	# of Pt	Marked Improvement	Good Improvement	Partial Improvement	No Improvement	Worse
The American Study	31	74.19%	12.90%	—	3.23%	6.45%
The Brazilian Study	1130	91.15%	7.51	79%	.35%	0.17%

Table 2 Comparison Between EDTA Treatment of CHD and the Usual Medical and Surgical Methods (Except Coronary Endarterectomy)

	# of Pt.	Mortality(2Y)	Marked Improvement	Good Improvement	Partial Improvement	No Improvement	Worse
Medical	—	23.6%	—	13%	—	87%	—
Surgical	—	—	44%	41%	—	15%	—
EDTA The American Study	76	13%	87%	9.2%	—	3.8%	—
The Brazilian Study	844	0.2%	76.89%	16.58%	3.79%	2.60%	0.1%

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EDITOR OF THE MONTH

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Cleveland, Ohio

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ULTRAVIOLET BLOOD IRRADIATION THERAPY

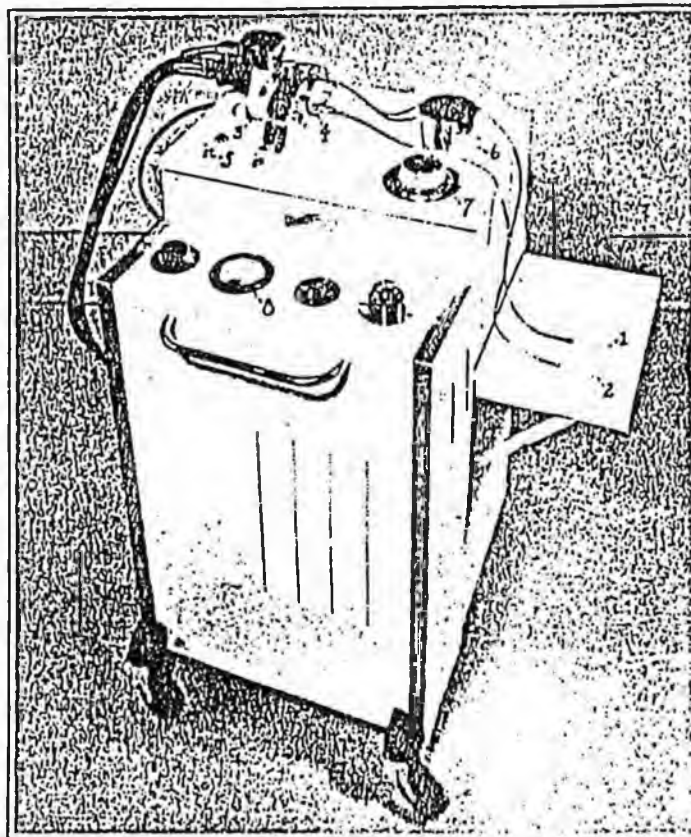
GEORGE MILEY, M.D., D.Sc. (Med.)

Clinical Professor of Pharmacology, The Hahnemann Medical College and Hospital

PHILADELPHIA, PENNSYLVANIA

By ultraviolet blood irradiation therapy, or blood irradiation, is meant today the technic originally devised and recently modified by E. K. Knott, of Seattle, of withdrawing and citrating a predetermined amount of a patient's venous blood and immediately returning the citrated blood intravenously through a Knott hemo-irradiator shown in the accompanying photograph, a machine which is designed to receive the citrated blood, expose it to ultraviolet radiation from a mercury-quartz burner and return it intravenously.

I shall endeavor in this paper to present briefly what work has been done in this field to date by outlining the history of its development, the technic and the dosage employed, the known biochemical and physiologic effects of ultra-



Blood irradiation machine (Knott hemo-irradiator). 1, glass-tipped adapter for the suction, or withdrawal, end of the rubber tubing system. 2, glass-tipped adapter for the intravenous, or injection, end of the system. This is fitted to a needle in the patient's vein. Citrated blood that has just passed through the irradiation chamber (see 4) and thus been irradiated is returned to the venous circulation through this adapter. 3, water-cooled, mercury-quartz burner, the source of high-intensity ultraviolet energy used in irradiating blood. 4, Knott irradiation chamber with quartz window held in contact with mercury-quartz burner. Blood is passed through this chamber, its time of exposure being carefully and automatically adjusted. 5, hemo-irradiator starting switch. 6, synchronized transfusion pump. 7, dial regulating rate of flow and time of exposure. 8, voltmeter.

violet rays observed to occur after blood irradiation, the present field of clinical application, its future potentialities and its suggested application to war medicine.

History

In 1934 Knott and Hancock¹ reported the rather spectacular recovery of 2 apparently moribund patients—1 with septicemia and 1 with brain abscess—after the ultraviolet irradiation of a predetermined amount of their blood and immediate reinjection of that blood. The technic has since been somewhat modified by Knott and in its modified form is that referred to in this paper as the Knott technic of ultraviolet blood irradiation therapy.

Since 1939 a series of reports has been made respectively by Rehbeck,² Barrett³ and Miley,⁴ each working independently, on the results of further investigations of several phases of its clinical application. These reports demonstrated clearly the occurrence after use of this method of several of the known biochemical and physiologic effects of ultraviolet energy, such as the bactericidal and the detoxification effects. The combined total of blood irradiations done by Rehbeck, Barrett and Miley had reached 6,520 by June 1, 1942;⁵ the complete absence of deleterious effects has been observed by all physicians with the method.

Technic and Dosage

The irradiation of blood with ultraviolet energy by means of a hemo-irradiator is made possible by a combination of three devices: (1) a modified Knott irradiation chamber, (2) an automatic transfusion pump and (3) a water-cooled, mercury-quartz burner.

The irradiation chamber is a silver, disk-shaped, quartz-windowed container through which the blood passes and in which it is irradiated.

The automatic transfusion pump allows blood to be pumped by propulsion through rubber tubing and through the Knott chamber at whatever rate is desired, thus making possible careful control of the time of exposure to ultraviolet energy of each cubic centimeter of blood as it passes through the chamber. An intermittent exposure is obtained by a rotating shutter interposed between the irradiation chamber and the mercury burner.

The water-cooled type of mercury-quartz burner is used and is fastened approximately 1 cm. from the quartz window of the irradiation chamber through which the blood is pumped. The ultraviolet rays are confined to a closed, highly polished steel housing and have the same intensity as if at actual contact.

The clinical application of this combination consists of withdrawing a predetermined amount of venous blood from the patient, citrating it (1 part of 2.5 per cent sodium citrate solution to 5 parts of blood) and immediately returning it through the hemo-irradiator to the vein from which it was withdrawn. The immediate return to the venous circulation of irradiated blood through a closed system obviates the rapid loss from irradiated blood of ultraviolet energy, which occurs if blood is, for example, spread out in open flat receptacles during irradiation.

In using this method it is necessary to be sure that three important factors are kept constant. These are (1) the amount of blood withdrawn and irradiated, (2) the time of exposure to ultraviolet energy and (3) the intensity and the wavelength of the spectral energy used.

The amount of blood to be used is calculated from the formula $A = KW$, in which A is the amount in cubic centimeters to be withdrawn, K is a constant (1.5 in this work) and W is weight expressed in pounds. The amount of blood used rarely exceeded 300 cc., as can readily be seen from the formula.

The time of exposure is considered to be the time required for the passage of 1 cc. of blood through the Knott irradiation chamber while exposed at con-

tact to the ultraviolet emanation described hereafter; the average time of exposure in this work was ten seconds.

Ultraviolet wavelengths within the range from 2,399 to 3,654 angstrom units were used. The intensities corresponding to the wavelengths used are shown in the following tabulation:

Angstrom Units (Wavelengths)	Milliwatts/cm. ² (Intensities)	Angstrom Units (Wavelengths)	Milliwatts/cm. ² (Intensities)
2,399	55,000	2,897	96,000
2,483	88,000	2,967	224,000
2,536	273,000	3,022	435,000
2,652	239,000	3,125-32	718,000
2,753	86,000	3,342	73,000
2,804	139,000	3,473	41,000
		3,650-54	1,538,000

It can be observed from this method of estimating the dose and keeping it relatively constant that the fundamental laws underlying the mechanism of photochemical processes have been carefully taken into consideration. The Grotthus-Draper law,⁶ known also as the first law of photochemistry, stating that only light which is absorbed can act chemically; the Bunsen-Roscoe⁷ law, which states that a photochemical change is proportional to the intensity and the time of illumination; Stokes⁸ law, stating that the wavelengths of secondary, emitted rays are greater than the primary exciting rays; Einstein's⁹ photochemical equivalence law, which states that each absorbed quantum should cause one light-absorbing molecule to react chemically, and the production of chain reactions¹⁰ by secondary emanations, must be as applicable to biochemical reactions as to chemical reactions in general.

Observed Biochemical and Physiologic Effects

1. *Bactericidal Effect.* — The bactericidal effect of ultraviolet energy long has been a matter of common knowledge owing to the excellent work of Downes and Blount,¹¹ Ward,¹² Coblenz,¹³ Bayne-Jones,¹⁴ Wyckoff,¹⁵ Bachem and Dushkin,¹⁶ Hodes, Webster and Lavin,¹⁷ and others. In the course of this work ultraviolet energy has been demonstrated to be lethal for the streptococcus, the staphylococcus, the colon bacillus, the tubercle bacillus, the pneumococcus, etc.

The bactericidal effect of ultraviolet irradiation of the blood has been demonstrated independently both by Miley¹⁸ (in 103 consecutive cases of acute pyogenic infection) and by Rebbeck² in 14 serial cases of generalized peritonitis, 19 cases of appendical abscess, 21 cases of puerperal sepsis and 22 cases of post-abortional sepsis. Both Miley and Rebbeck have shown that blood irradiation is a safe and efficient method of controlling infection and that it has often succeeded when chemotherapy has failed. A summary of their work shows that they have found that blood irradiation controls acute pyogenic infections with and without septicemia to an extent hitherto unseen. Exceptions have been *Staphylococcus aureus* septicemia and bacterial endocarditis.

In the accompanying temperature graphs (figures 1, 2, 3 and 4), one can see clearly the effects observed in spontaneously arising septicemias in human beings, which I feel are a more accurate index of the effect of any bactericidal agent than those observed in artificially induced septicemias in small laboratory animals.

2. *Detoxification Effect.* — Many investigators have shown that both direct sunlight and ultraviolet energy from artificial sources have a definite action on certain organic poisons. The greater amount of work has been done on snake venoms, saponins, toxic plant proteins and bacterial and virus toxins.

Double Septicemia, B. coli + Strep. hemolyticus

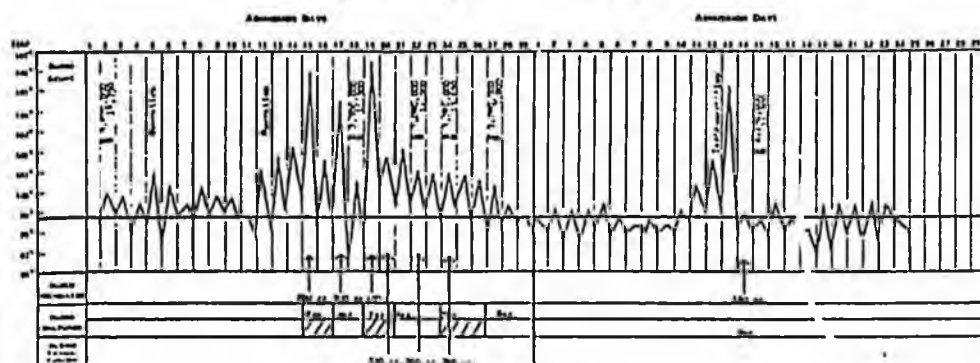


Fig. 1. — This is a rare example of a double septicemia in which blood cultures were found to be positive for both streptococcus hemolyticus and colon bacillus following second stage prostatectomy. It will be observed from the above graph that three blood irradiations were given at forty-eight hour intervals. Forty-eight hours after the first blood irradiation the blood cultures became negative temporarily, and the streptococcus hemolyticus disappeared permanently. However, colon bacillus reappeared in the blood cultures just before the third irradiation, the patient's temperature rising to 100.8 F. at this time. Following the third blood irradiation the patient's clinical condition improved greatly, so no further blood irradiation was given, although the blood cultures became positive with colon bacillus for a three day period seventy-two hours after the third irradiation, but became negative permanently from this period on. The patient continued to convalesce unevenly, except for an instrumentation chill, and was discharged from the hospital in apparently good condition, and with negative blood cultures thirty-four days after the third irradiation. The fourth blood irradiation was given as a precautionary measure following the appearance of the instrumentation chill. — (Drs. E. W. Rehbeck, R. A. Walther, Shadyside Hospital, Pittsburgh.)

Colon Bacillus Septicemia Secondary to Acute Pyelitis

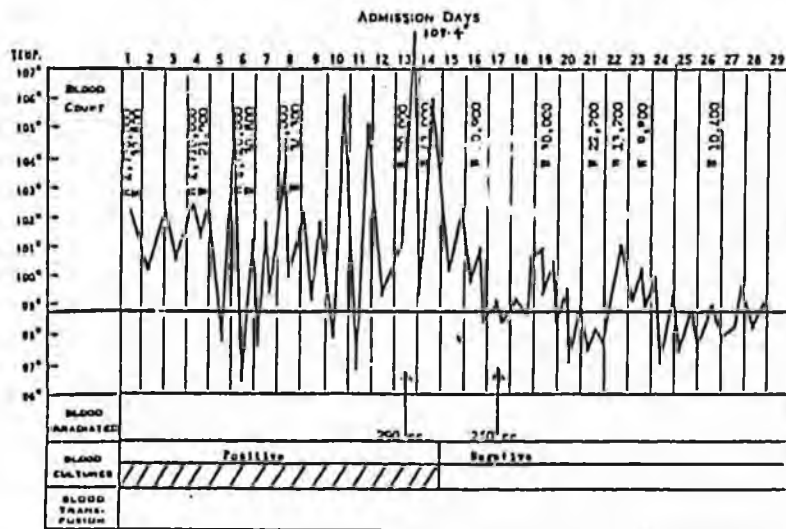


Fig. 2. — In this case of colon bacillus septicemia secondary to acute pyelitis blood irradiation was instituted after the patient had been in a coma for forty hours, her blood cultures had been positive for thirteen days, and her temperature had reached 104 F. forty-eight hours after initial blood irradiation blood cultures became negative, and the patient's toxic symptoms began to subside, and ninety-six hours later the patient was greatly improved, temperature falling to normal. A second blood irradiation was given as a precautionary measure. The patient convalesced quite well, leaving the hospital in apparently excellent condition fifteen days after the initial blood irradiation. — (Drs. R. Paine, U. Coe, Portland Sanitarium, Portland, Oregon.)

Noguchi¹² found an inactivation of all the principal toxic effects of the venoms of the cobra (*Naja naja*), the daboia (*Vipera russellii*) and the rattle-

snake (*Croalus admanteus*). Massol¹⁹ and Much, Peemöller and Haim²⁰ demonstrated conclusively the destruction of cobra venom *in vivo*. Arthus and Collins²¹ showed a marked destruction of the *in vivo* toxicity of the daboia and the cobra, the fer-de-lance (*Bothrops atrox*) and the tropical rattlesnake (*Croतालus terrificus*).

In 1907 Dreyer and Haussen²² showed that the glucosides saponin and cyclamin and the toxic proteins ricin and abrin all lose their hemolytic power

Streptococcus Hemolyticus Septicemia

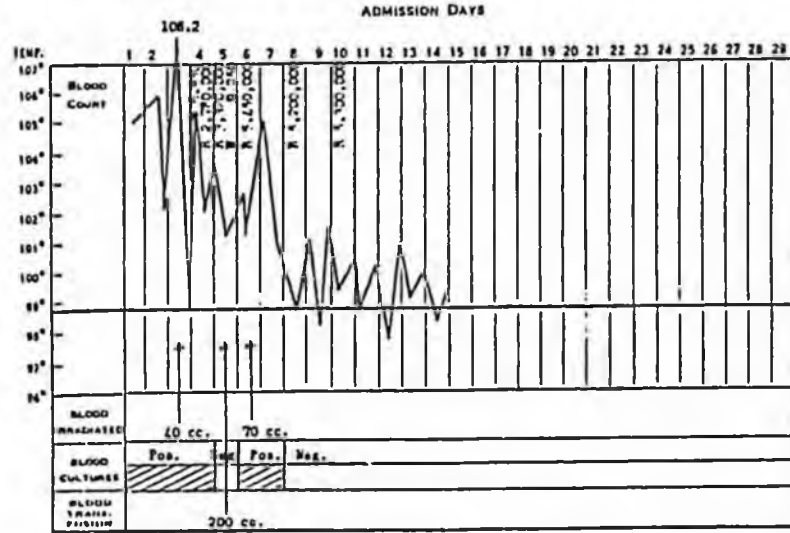


Fig. 3. — Blood irradiation was instituted in this case of streptococcus hemolyticus septicemia secondary to acute otitis media after patient had been in a coma over forty hours, and her temperature had reached 106.2 F. Forty-eight hours after initial blood irradiation a single blood culture came negative, but seventy-two hours later blood irradiation was given, within forty-eight hours blood cultures were negative, and the patient began an uneventful convalescence. — (Dr. Hager, Bellevue Hospital, New York.)

Streptococcus Non-hemolyticus Septicemia

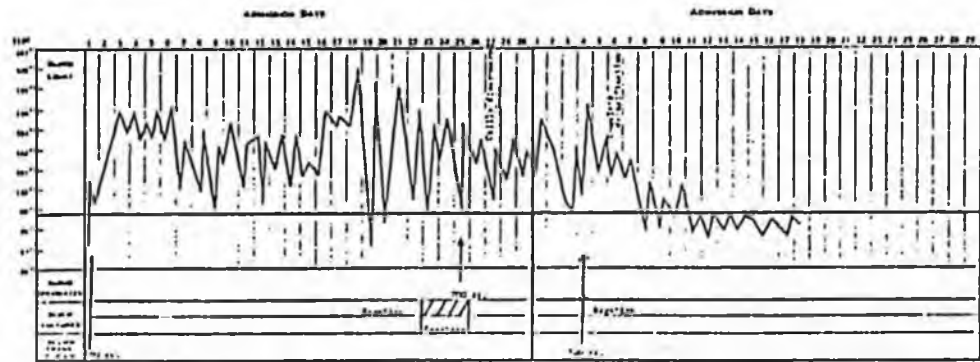


Fig. 4. — At the time of initial blood irradiation this patient had, after twenty-two days of intensive chemotherapy, developed a nonhemolytic streptococcus septicemia secondary to puerperal sepsis following Caesarian section. Twenty-four hours later blood cultures became negative, and forty-eight hours later the patient was free of chills, the first time in twenty-six days. A second blood irradiation was given eight days later. From that point on the patient convalesced uneventfully. — (Dr. H. Crowther, St. Casan, Hahnemann Hospital, Philadelphia.)

under ultraviolet irradiation. Tappeiner and Jodlbauer,²³ Busck,²⁴ Baroni and Jonesco-Mihaiesti,²⁵ Schubert²⁶ and Carmichael²⁷ showed that ricin loses its toxicity after ultraviolet irradiation. Welch²⁸ showed that ricin's toxic and agglu-

tinating powers are destroyed at about the same rate by ultraviolet irradiation but that its antigenic power is more resistant.

As might be expected, many bacterial toxins have been found extremely sensitive to and easily inactivated by ultraviolet rays. In 1889 Roux and Yersin²⁰ made the observation that diphtheria toxin kept in the dark, was almost completely inactivated by exposure to direct sunlight. This was confirmed by Emmerling.²⁰ The destruction of tetanus toxin by ultraviolet irradiation was shown by Hartoch, Schurmann and Stiner,²¹ as well as by Welch²⁴ and others.²⁵

Tetanus toxin was early found to be sensitive to light by Tizzoni and Cattani,²² in 1891. Flexner and Noguchi²³ in 1906 noted that photodynamic destruction of the lytic and tetanus spasmic principles of tetanus toxin was more rapid by sunlight in solutions containing eosin or similar dyes. Ultraviolet inactivation of tetanolysin was first described by Courmont and Nogier²¹ in 1909.

Incomplete Septic Abortion, Bilateral Salpingitis

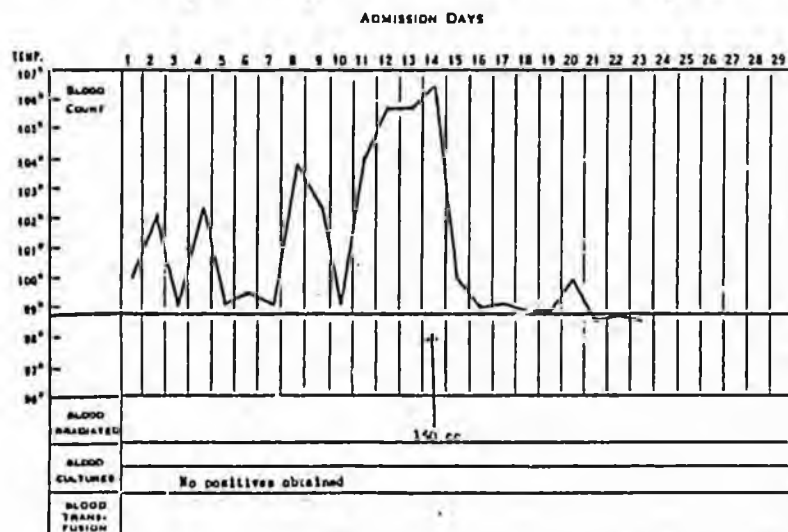


Fig. 5. — In this patient with bilateral salpingitis, and an incomplete septic abortion, blood irradiation was first instituted when the patient was apparently moribund, and her temperature had reached 106.4 F. despite eight days of intensive chemotherapy. On the first post irradiation day her temperature dropped rapidly, and her toxic symptoms began to subside. Forty-eight hours later detoxification was complete. Patient convalesced uneventfully, being discharged nine days after blood irradiation. — (Drs. H. Barrett, W. Schutman, City Hospital, New York.)

The gradual loss of toxicity of meat extracts in which *B. botulinus* had been grown was noted by Van Ermengem,²⁵ Thom, Edmonson and Giltner²⁶ and Schoenholz and Meyer.²⁷

The hemolytic toxin of *Bacillus proteus* was rapidly inactivated by ultraviolet irradiation according to Ecker and Brittingham.²⁸

Finally, Macht²⁹ has described the inactivation of the toxin of pernicious anemia by ultraviolet irradiation.

An interesting feature of all the experimental work is that the rate of destruction of the various bacterial toxins was accelerated both by the presence of oxygen and by exposure of the toxin in a relatively dilute solution; also, the presence of eosin or photosensitive dyes speeded up inactivation of the toxin by ultraviolet rays.

With this vast background of scientific investigation it is not surprising that there has been looked for and observed clinically a marked detoxification effect in patients suffering from profound toxemia secondary to uncontrolled acute pyogenic infection. So constantly has this been noted that I⁶ have recently

adopted for a more careful study of this effect the term "detoxification time." The detoxification time is arbitrarily divided into two components, early and complete, which are defined as follows: early, the time in hours which elapses between initial blood irradiation and early signs of subsidence of toxic symptoms; complete, the time in hours elapsing between initial blood irradiation and a complete detoxification effect, i. e. that point at which it becomes clearly evident that the patient's condition is no longer precarious. The average detoxification time as reported by us in collaboration with Rebbeck in 72 consecutive cases of peritonitis may be summarized as follows:

Of 39 patients with generalized peritonitis, 32 recovered—100 per cent of those with moderately advanced peritonitis and 53 per cent of the apparently moribund. In the 32 patients who recovered, signs of early detoxification appeared on the average 34.5 hours after initial irradiation, and the average complete detoxification time was 81.75 hours. Twenty-nine of these patients received one, 6 received two and 4 received more than two treatments.

Ultraviolet blood irradiation therapy used as a control of infection in 20 cases of localized peritonitis and appendical abscess gave the following results: 17 patients recovered—100 per cent of those with moderately advanced infection and 75 per cent of the apparently moribund. In those 17 patients who recovered the average early detoxification was apparent in 24.71 hours and complete in 52.94 hours. Fifteen of the 20 patients had one irradiation, 4 were given two irradiations and 1 had more than two.

Twelve patients suffering with severe pelvic peritonitis accompanied by multiple pelvic abscesses were given ultraviolet blood irradiation therapy with the result that 9 recovered—all 3 of those in whom the peritonitis was moderately advanced and 67 per cent of those who had been thought moribund. In all 12 detoxification became apparent in 54.0 hours on the average; complete detoxification occurred in 10 patients at an average of 90.0 hours after initial blood irradiation. Five patients in this series received one irradiation only, 6 were given two irradiations and 1 had three irradiations.

In the 72 cases of peritonitis reported there were 14 deaths, all 14 occurring in the apparently moribund type of patient, of whom there were 33.

The rapid fall in temperature which occurs after blood irradiation in the majority of patients suffering from acute pyogenic infection uncomplicated by abscess formation or the presence of peritoneal drains may be seen from figures 5, 6, 7 and 8.

The accompanying temperature graphs are typical of cases of acute pyogenic infection complicated either by abscess formation or the presence of a peritoneal drain. In each instance detoxification occurred before the temperature fell to normal, the temperature falling to normal only when a large abscess was evacuated (fig. 9) and when, as shown in the last graph (fig. 10), the peritoneal drain was removed.

3. *Increased Venous Oxygen.*—The ability of irradiated blood or plasma to pick up oxygen has been demonstrated by Mayerson and Laurens¹⁰ and by Harris.¹¹ Miley¹² reported that there appears one hour after ultraviolet blood irradiation therapy a marked and persistent rise in the venous oxygen content of patients with abnormally low venous oxygen values. This rise was usually associated with improvement in the patient's general condition and skin coloration, with no compensatory rise in hemoglobin content or red cell count which could possibly account for it. Consequently, it is my impression that blood is enabled to pick up more oxygen after blood irradiation than without irradiation in patients with low venous oxygen values. The relationship of oxygen to detoxification by ultraviolet irradiation in experimental work has already been mentioned; no comment can be made at this time on the relation between

Incomplete Septic Abortion, Septic Endometritis

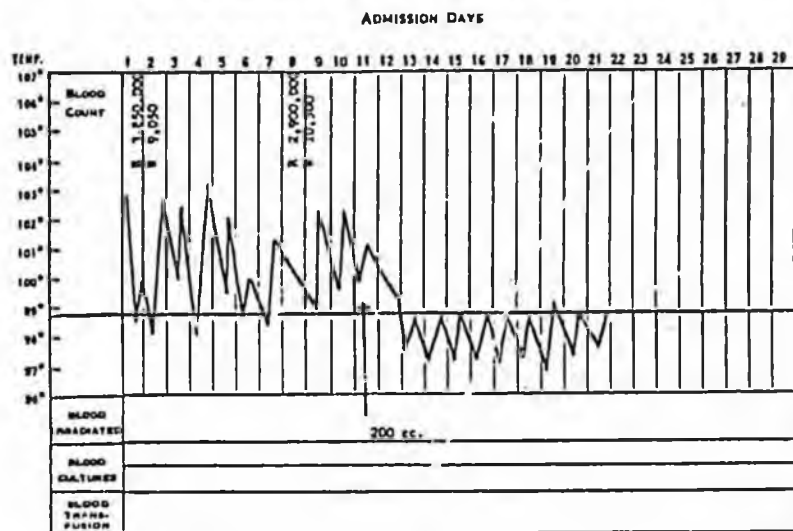


Fig. 6. — In this case of incomplete septic abortion, and septic endometritis, one week of intensive chemotherapy, and three days withdrawal of chemotherapy had failed to control the progress of the infection, so that at the time of blood irradiation the patient was extremely debilitated, toxic and jaundiced. On the first post irradiation day her toxic symptoms began to subside, and forty-eight hours after blood irradiation therapy she was obviously out of danger, detoxification being complete at this time. — (Drs. H. Crowther, G. Miley, Hahnemann Hospital, Philadelphia.)

Pelvic Peritonitis following Caesarian Section

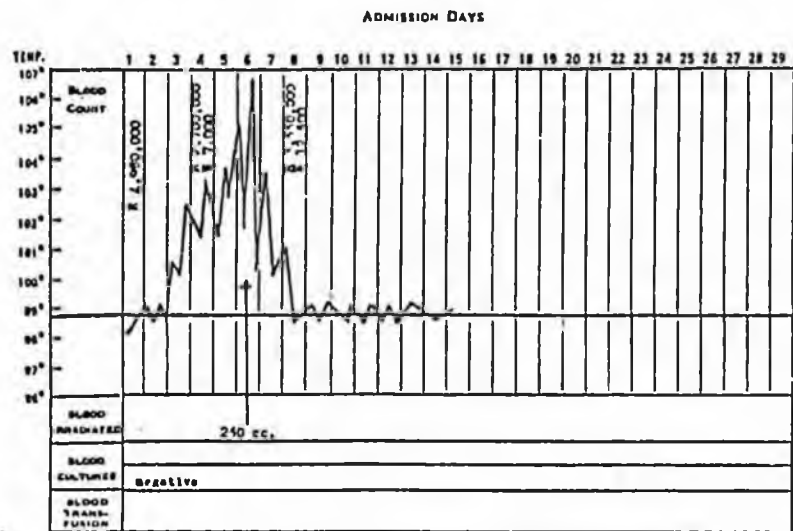


Fig. 7. — In this patient suffering from severe pelvic peritonitis following Caesarian section, it was observed that after twenty-four hours intensive chemotherapy the red count had begun to fall, and the temperature to rise, with an associated rapid deterioration of her general condition. Blood irradiation was instituted when the temperature reached 106.8 F.; within the next twenty-four hours patient's symptoms subsided markedly, and detoxification was complete in another twenty-four hours. Patient's convalescence was uneventful. — (Drs. N. Paxson, G. Miley, Hahnemann Hospital, Philadelphia.)

detoxification and increased venous oxygen following ultraviolet blood irradiation therapy.

4. *The Vaccine Effect.* — Much experimental work has been done in producing various bacterial and virus vaccines with ultraviolet energy. The fundamental theory behind this work is that ultraviolet irradiation may often inactivate the

toxic properties of bacteria and viruses, even such substances as snake venoms^{18, 19, 20, 21} without destroying their respective antigenic properties. According to Trotskii,²² bacteria killed by ultraviolet light lose a considerable part of their toxicity toward laboratory test animals but completely retain their antigenic and immunizing characteristics.

Smithburn and Lavin²³ demonstrated that suspensions of tubercle bacilli which had been irradiated with monochromatic ultraviolet light (2,537 angstrom units) are rendered avirulent and viable and so possess the capacity of producing demonstrable immunity. Hodes, Webster and Lavin²⁴ have shown that the rabies virus exposed to mercury-vapor lamp rays loses virulence yet retains considerable immunizing potency for mice. Morgan and Lavin²⁵ have produced a noninfective immunizing antigen by ultraviolet irradiation of the virus of Eastern equine encephalomyelitis.

Generalized Peritonitis, Acute Gangrenous Appendicitis

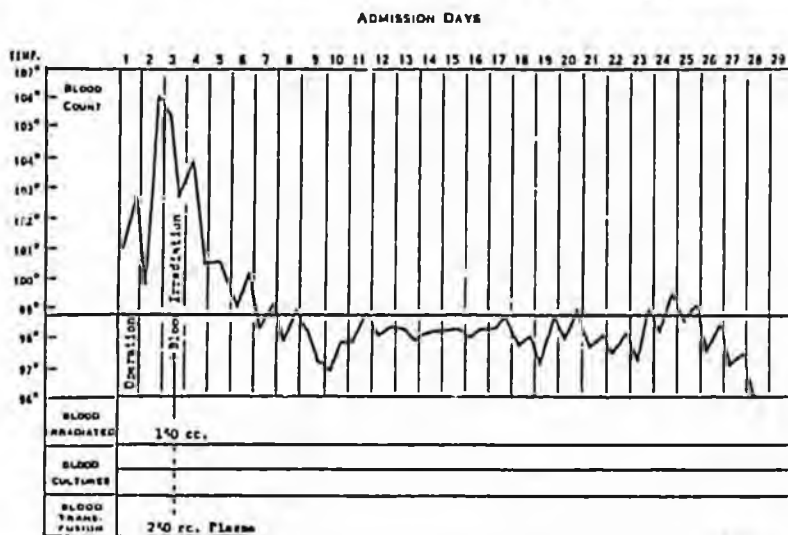


Fig. 8. — At the time of blood irradiation this individual was in profound shock secondary to an overwhelming toxemia, and general peritonitis following removal of a gangrenous appendix forty-eight hours previously. Despite shock 150 cc. of the patient's blood was withdrawn and irradiated. Within a few minutes following the return of the irradiated blood the patient's pulse began to improve markedly. The classical signs of shock disappeared. Nevertheless, 250 cc. of plasma was given. On the first post irradiation day the patient was able to sit up in bed, and write a letter, definite objective evidence of a dramatic detoxification effect occurring in this person; his convalescence from this point on was uneventful. — (Dr. F. Bristol, G. Miley, Hahnemann Hospital, Philadelphia.)

In respect to vaccine effects found clinically after ultraviolet blood irradiation, the following meager but stimulating observations have been made:

In 11 patients suffering from severe and intractable furunculosis of six months' to 6 years' duration a complete subsidence of the acute stages of the disease and a lack of recurrences were observed after two to four blood irradiations given at two to five week intervals. One patient when first seen was suffering from the daily appearance of forty to sixty new boils; four blood irradiations were necessary before complete subsidence of the disease process occurred. The patient has been placed on a schedule of two to three blood irradiations per year, and his recurrence furunculosis has been well controlled for the last three years.

Six patients with intractable herpes zoster — 4 in the acute and 2 in the chronic stage have been treated with ultraviolet blood irradiation therapy. The 4 patients treated in the acute stage are known to have had no recurrences after

Pelvic Abscesses, Bilateral Pyosalpinx

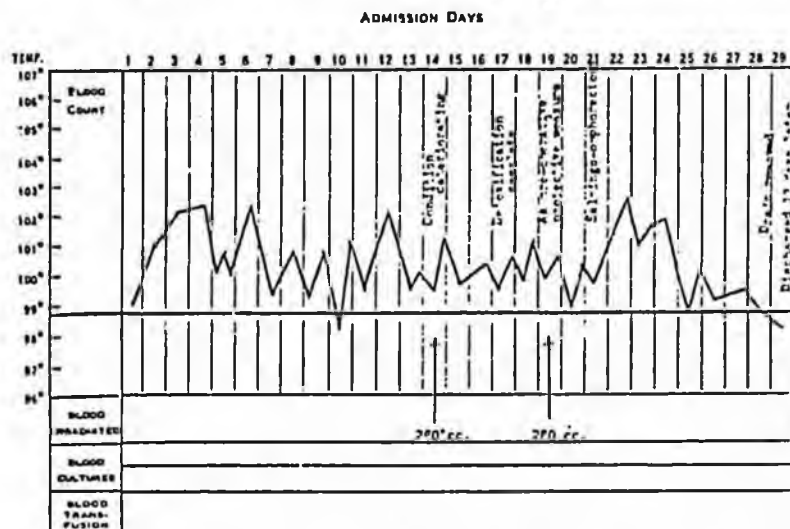


Fig. 9. — The condition of this patient suffering from multiple pelvic abscesses, and bilateral pyosalpinx, deteriorated constantly despite conservative treatment, and with the appearance of toxic symptoms on the 11th hospital day blood irradiation was instituted. Twenty-four hours later detoxification had begun, and was complete at the end of seventy-two hours, although her temperature remained elevated due to the presence of a nonvacuolated accumulation of pus in the pelvis. Forty-eight hours after a second preoperative blood irradiation, salpingo-oophorectomy was performed. Following evacuation of this large focus of infection the temperature fell to normal, and the patient convalesced uneventfully. — (Drs. E. Craig, E. Hessert, Hahnemann Hospital, Philadelphia.)

Generalized Peritonitis, Paralytic Ileus, Lobar Pneumonia

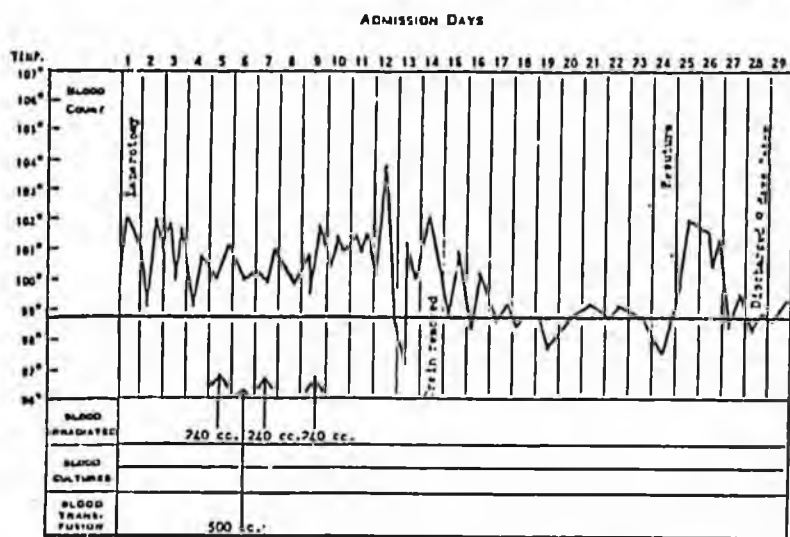


Fig. 10. — At the time of initial blood irradiation this patient suffering from generalized peritonitis secondary to gangrenous appendicitis, and with a four and one-half day history of paralytic ileus, had just developed lobar pneumonia, and was extremely dyspneic and cyanotic. In the first few minutes following initial blood irradiation the patient's dyspnea and cyanosis dramatically disappeared. However, a second and third irradiation was necessary before the patient's toxic symptoms subsided. His temperature remained elevated despite the subsidence of toxic symptoms until removal of a peritoneal drain. From this point on the patient, except for a slight rise in temperature following resuturing of the abdominal wound, convalesced quite well, and was discharged from the hospital thirty-three days after initial blood irradiation. — (Drs. E. Dickson, G. Miley, Hahnemann Hospital, Philadelphia.)

a subsidence of the acute symptoms of the disease, forty-eight to seventy-two hours following blood irradiation; 1 of the 2 patients with chronic herpes zoster has been markedly relieved of symptoms, while the other has not been heard of since his original blood irradiation.

The production of a vaccine effect seems to have occurred in the cases of chronic furunculosis mentioned. Whether or not this has occurred in the cases of herpes zoster mentioned seems problematic but worthy of mention.

5. *Photosensitization.*— In 1897 Raab¹⁵ first noticed and described the lethal action of acridine on paramecia exposed to light contrasted with its non-lethal action in the absence of light. This phenomenon was called photodynamic action or photosensitization. Jodlbauer and Tappeiner^{23, 46} soon afterward followed up this discovery with a series of brilliant experiments showing that sensitization of a biologic system to visible and ultraviolet light can be produced by various fluorescent dyes. Today the chief concern is the fact that sulfa drugs produce photosensitization and photoallergic effects in man. This principle has been described by Epstein¹⁷ and Blum.⁴⁸ I⁴⁹ have reported recently the presence of untoward photosensitive effects, such as convulsive seizures, renal shut-down and a rapid increase in toxic symptoms when sulfanilamide, sulfathiazole or sulfapyridine was given within the first four or five days after ultraviolet blood irradiation therapy and the complete absence of such effects when ultraviolet blood irradiation therapy was given as soon as an hour after the blood levels of these drugs had been ascertained to be at a maximum of tolerance.

6. *Other Effects.*— Vasodilation, desensitization and a reduction of edema have been observed to occur frequently, but no statistics are available concerning these effects.

Clinical Applications

Several and varied clinical applications of ultraviolet blood irradiation therapy have been made, and as a result a few general statements can be made at this time as to the value or lack of value of this method in the following conditions:

1. *Acute Pyogenic Infections.*— In 1934 Knott and Hancock¹ first reported the recovery, following ultraviolet blood irradiation therapy, of 2 patients with apparently hopeless septicemia. In 1940 and again in 1942 Miley^{46, 4} made several clinical observations on patients with acute pyogenic infection given blood irradiation, notably both a marked bactericidal and a rapid detoxification effect. These were confirmed soon afterwards by Rebbeck.² Throughout this work with acute pyogenic infections a large number of chemotherapeutic failures was met with. The majority of those patients in whom sulfa drug therapy had obviously failed were apparently moribund at the time of initiation of ultraviolet blood irradiation therapy. Sixty to 75 per cent of all chemotherapeutic failures were found to show marked bactericidal and detoxification effects after blood irradiation. Recently, Miley and Rebbeck¹⁶ jointly reported that blood irradiation had been used with most encouraging results in 72 unselected cases of severe and advanced peritonitis, including the recovery of 20 out of 29 apparently moribund patients in whom sulfa drug therapy had failed to control infection.

2. *Preoperative Protection.*— Blood irradiation has been used as a preoperative, protective measure before operations on septic patients. Rebbeck²⁰ recently has been able to demonstrate conclusively the protective preoperative effect of ultraviolet blood irradiation therapy in cases of incomplete septic abortion. Briefly summarizing his recent and brilliant contribution one finds:

Twenty-two patients with postabortional sepsis were given ultraviolet blood irradiation therapy.

Practically no increase in temperature was noted after operation when hemoradiation was administered preoperatively, nor was any other untoward effect observed.

In 15 cases operation was performed within twenty-four hours after blood irradiation.

A definite protective effect was obtained against the usual disastrous spread of infection in the pelvis or into the blood stream.

Convalescence time varied from five to thirteen days.

3. *Intrinsic Bronchial Asthma.* — All that can be said about the use of blood irradiation in intrinsic bronchial asthma at this time is that it has been used for three and one-half years and the results have been sufficiently encouraging to justify continuing this therapy until a five year study has been completed.

4. *Chronic Arthritis.* — Over 200 patients with chronic atrophic or hypertrophic arthritis have been given ultraviolet blood irradiation therapy. The data on these have been collected only over a period of three and one-half years, and until a five year study has been made no report can be given. The results have been sufficiently encouraging to justify continuing this work in collaboration with the arthritic clinic.

5. *Other Diseases.* — This method has been used sporadically in many other disease processes, and I have never seen any response whatever in neoplastic diseases, leukemia, psoriasis or Hodgkin's disease.

Potentialities of Ultraviolet Blood Irradiation Therapy

The potentialities of ultraviolet blood irradiation therapy as an adjunct to the intelligent practice of medicine and surgery are unlimited in comparison with the present knowledge of the subject. It is my personal opinion that the future of ultraviolet blood irradiation therapy is necessarily closely connected with the reproduction of the biochemical and physiologic effects of ultraviolet energy both known and unknown.

Its future use in combating the tubercle bacillus represents a lifetime work for many investigators.

The early application of blood irradiation in anterior poliomyelitis and various forms of encephalitis seems to me to be a fertile field for investigation. The 2 cases of anterior poliomyelitis in which it has been used, once by Moser⁴⁹ and once by Hancock,⁵⁰ showed a rapid subsidence of both the toxic and the paralytic signs and symptoms.

At present it is the opinion of all of us who are working with ultraviolet blood irradiation therapy that our efforts should be directed primarily to discovering all possible applications of this method to war medicine. The two applications that we all feel to be of sure and practical value in war medicine are (1) in the field of chemotherapeutic failures, and (2) in the treatment of chronic nonhealing wounds. A third application, of theoretical but probable value, would be in the acute toxemia of burns.

1. *Use in Chemotherapeutic Failures.* — Of 151 consecutive patients⁴⁴ with acute pyogenic infection given blood irradiation, 57 were obvious chemotherapeutic failures: 12 were in an early or moderately advanced stage, and 45 were apparently moribund. After blood irradiation 11 out of the 12 recovered uneventfully. Nineteen in the apparently moribund group recovered, and the remaining 26 were uninfluenced either by blood irradiation or by sulfa drug therapy. Of the 26 combined blood irradiation and chemotherapeutic failures, 9 had bacterial endocarditis and 7 had *Staphylococcus aureus* septicemia. I have never seen either of these diseases influenced by blood irradiation, although recovery has been observed in *Staph. aureus* septicemia following blood irradiation

by Rebbeck⁵¹ in 2 cases and by Barrett⁵² in 1 case. If all cases of bacterial endocarditis and Staph. aureus septicemia are excluded, there are a total of 31 recoveries among 41 cases of obvious chemotherapeutic failure, which is roughly 75 per cent. If only cases of bacterial endocarditis are excluded, and certainly they must be excluded in any consideration of infections due to war wounds, 31 out of 48 patients recovered. Therefore, according to the presence or absence of Staph. aureus septicemia, recovery may be expected after blood irradiation in 60 to 75 per cent of all chemotherapeutic failures to control infection.

It seems apparent, in view of the previously mentioned report made in collaboration with Rebbeck,⁵⁶ in which it is stated that 20 out of 29 patients in whom chemotherapy failed to control advanced peritonitis recovered after blood irradiation, that blood irradiation is the procedure of choice when sulfa drug therapy has failed to control infection.

2. *Use in Chronic Nonhealing Wounds.* — It is generally recognized today that there occurs in a low percentage of persons who have recovered from acute wound infections a failure in healing of the wound or wounds despite the very best local treatment plus normal supportive measures, such as infusions and transfusions and adequate diet. This failure has been considered due to the absence in such persons of a specific resistance factor, intrinsic in nature and of unknown composition, often referred to loosely as a general resistance factor. In any case, wounds do not heal in these few patients, as contrasted to the relatively rapid healing of wounds in most persons. During the last three and one-half years we have had occasion to use ultraviolet blood irradiation in the treatment of 7 such patients; the duration of the nonhealing wound varied from two months to six years. The lesions may be described briefly as fecal fistula in 2 cases, multiple and extensive lesions of skin and muscle in 2 cases, post-incisional failure of abdominal fascia and muscle to close despite numerous resuture attempts in 1 case, a 4 by 6 inch leg ulcer in 1 case and a nonhealing amputation stump in 1 case. The rapid appearance of wound healing and the recovery of all 7 of these patients in most convincing fashion has led us to believe that in each instance ultraviolet blood irradiation therapy supplied the necessary and lacking intrinsic or general resistance factor, which all other known types of therapy had failed to do.

It is impossible at this time to estimate the probable number of nonhealing wounds which will occur during the coming struggle, but we feel that in those instances in which wounds have not healed after two to three months of all other types of therapy, ultraviolet blood irradiation therapy should be administered.

3. *Use in Acute Toxemia of Burns.* — A logical experimental application of blood irradiation to war medicine, in view of its known detoxification effect in acute pyogenic infections, would be in those cases of severe burns with acute toxemia. We have no experience with this type of detoxification but feel the possibility worthy of mention.

Summary

1. A method of irradiating human blood, that originally devised and recently modified by Knott, is described. This consists of withdrawing and citrating a predetermined amount of a patient's venous blood and immediately returning it intravenously through a closed system containing a Knott irradiation chamber, at which point intense ultraviolet irradiation is applied.

2. The amount of blood used (predetermined according to approximate body weight), the time of exposure (optimally ten to twelve seconds in the treatment of acute pyogenic infections) and the wavelengths and intensity of

the spectral energy used form the basis for estimating and maintaining a relatively constant dosage.

3. The reproduction of several known biochemical and physiologic effects of ultraviolet radiation has been observed. They are the bactericidal, detoxification, vaccine and vasodilation effects, plus an increase in oxygen content of irradiated venous blood with abnormally low oxygen content.

4. This method has been applied clinically in acute pyogenic infections and as a preoperative, protective measure in septic cases; in both instances excellent results have been obtained. The exceptions in the former have been all cases of *Staph. aureus* septicemia and bacterial endocarditis. Its present use in other fields of medicine is mentioned, as are its potentialities.

5. The application of blood irradiation to war medicine in the near future is urged; its use in chemotherapeutic failures and in chronic, nonhealing wounds is considered the most practical field of application in war medicine.

6. It is obvious that we have employed this method whenever we have felt that patients would be benefited by a bactericidal and detoxification effect, a vaccine effect, an enhancing of the ability of the blood to pick up oxygen or a vasodilation effect. We have come to regard this therapy not as a specific for any one disease necessarily but as a method of applying various known physiologic and biochemical effects of ultraviolet radiation whenever they are indicated. We feel that this method may be likened to the use of saline and dextrose infusions in patients in whom clinical evidence of dehydration and anhydremia exist.

Conclusions

1. Ultraviolet blood irradiation therapy is a practical method of reproducing bactericidal, detoxification, vaccine and vasodilation effects and as such represents a valuable adjunct to the practice of medicine and surgery.

2. Its use is indicated in war medicine for the treatment of chemotherapeutic failures and chronic nonhealing wounds, and its adoption by medical departments of the armed forces is urged.

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