

*School Screening*

NORTHWESTERN UNIVERSITY

THE MEDICAL SCHOOL  
303 EAST CHICAGO AVENUE  
CHICAGO, ILLINOIS 60611

DEPARTMENT OF  
ORTHOPAEDIC SURGERY

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November 4, 1976

Dr. Edward D. Henderson  
President  
American Academy of Orthopaedic Surgeons  
430 N. Michigan Avenue  
Chicago, IL 60611

Dear Dr. Henderson:

As Chairman of the Education Committee of the Scoliosis Research Society, I have been charged with the responsibility of developing the protocol for a Spinal Screening Program and assisting in the implementation of this program on a nation-wide basis. Because the Scoliosis Research Society is an affiliate of the Academy and because the S. R. S. wishes to proceed in an orderly fashion, gaining the approval of the Academy and the Academy membership for this undertaking, I have requested that this matter be brought to the attention of the Academy's Board of Directors and that Dr. Kirk Ashley, who is assuming the responsibilities of the presidency of the S. R. S., present this information to the Academy's Board at its December meeting.

The basis for this proposal is the fact that an early detection program can reduce to virtual extinction the need for surgery in the treatment of adolescent idiopathic scoliosis, the largest component of the scoliosis problem. The S. R. S. recognizes this and heartily supports the concept and the obvious benefits to the general population. Moreover, the growing awareness of this fact by a number of organizations has led them to seek out direction, advice and leadership from the S. R. S. These organizations include state and local child health bureaus, societies created for improving pediatric health standards over a broad spectrum and even charitable groups who have taken on scoliosis screening as their "project". The consequences of haphazard and poorly planned screening programs

are confusion and chaos, and possibly a "backfire", causing a negative reaction on the part of patients, parents and physicians. This must be avoided, and the S. R. S. must assume its responsibilities in shaping a protocol which is professional, effective and realistic. The S. R. S. recognizes the role it must take, and will do so willingly.

Fortunately, an offer to assist has been received from the Health Services Area of Merck, Sharp and Dohme's Public Relations Department, which has collaborated with other national medical, private sector and governmental organizations on nationwide public information programs about major health problems. The American Academy of Pediatrics is one of the organizations they have worked with, as well as the National High Blood Pressure Education Program, the National Association for Mental Health, Inc., the American Association of Suicidology, (Suicide Prevention), the Center for Disease Control and the Arthritis Foundation. Merck Sharp and Dohme is willing to support this campaign financially and more importantly, they will provide their experience and expertise in handling information "packages", including movie and sound-slide production, pamphlet and handbook presentations and the effective use of the media. They wish, in simplest terms, to project an improved public image and because there is no product identification or endorsement sought, I believe this relationship can be both very beneficial and simultaneously "clean and pure".

Recently, initial conversations have been held, at her request, with Mrs. Jane Shover, Executive Director of the Easter Seal Society, regarding the potential role for that organization in the screening program. Various chapters have been bombarding the main office with requests for information on spinal screening and Mrs. Shover appears very interested in collaborating, on our terms, with the S. R. S. and M. S. D. It must be emphasized that this certainly would not be an "exclusive" relationship since the S. R. S. would require that it preserve its autonomy to assist other competent organizations in establishing screening programs but at the same time there is little doubt that the Easter Seal does have distribution capacities far in excess of those of the S. R. S. or M. S. D.

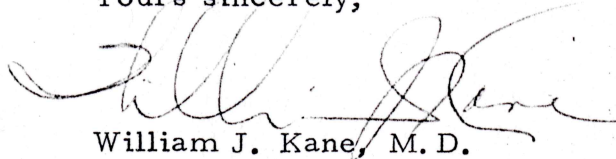
The best analogy I can offer is that of the three-legged stool-- the S. R. S. provides the medical expertise on the screening protocol and standards--M. S. D. provides information management expertise-- and child health groups such as state bureaus, school systems and others can utilize the program at the grass roots level.

On the enclosed material I have prepared a brief resumé of the program from a number of aspects; I hope that it will help you and the Board of Directors to learn more of this program and to agree that it deserves the support of the Academy membership as a deserving public service which can help thousands of young people in the years

to come. In addition, we earnestly solicit the suggestions and participation of the Academy members in this program which will not create difficulties for the orthopaedist but will rather help him to help the people he serves.

Warm personal regards.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "William J. Kane". The signature is written in dark ink and is positioned above the printed name.

William J. Kane, M. D.

WJK/mjh

## THE SPINAL SCREENING PROGRAM

### INTRODUCTION:

Scoliosis affects 5 adolescents per 1000 to the extent that they have a curve of 20 degrees or more, and consequently, deserve treatment. Since there are approximately 4,000,000 at each year of age in the age group 11 to 15 approximately, which is most affected by early scoliosis, it can be seen that there are 20,000 youngsters at each year of age who will require treatment for scoliosis and many would require surgery if the condition is not detected until far advanced. In addition to the 20,000 who it is estimated will require therapy, there are 100,000 who deserve observation to determine they don't progress from the 10 to 20 degree range into the greater-than-20 degree range.

Because an early detection program and the use of nonoperative therapy can reduce to virtual extinction the need for surgery in the treatment of adolescent idiopathic scoliosis, the Scoliosis Research Society has decided to support and implement the concept of early detection of scoliosis, kyphosis and lordosis through a national screening program. The Scoliosis Research Society requests that the American Academy of Orthopaedic Surgeons review the following proposal and the associated circumstances relative to the proposal. The implications, consequences and results of such a program have been anticipated and evaluated, and these projections have been included for review.

PROPOSAL:

I. The Scoliosis Research Society, an affiliate of the American Academy of Orthopaedic Surgeons, should undertake to develop a protocol for a nationwide Spinal Screening Program which will:

A) Advise the general population of parents and adolescents about scoliosis, the possible consequences of untreated scoliosis and the benefits of an early detection screening program.

B) Instruct primary screeners, such as physiotherapists, school nurses, physical education instructors, etc., on the goals, methods and standards of detecting early spinal abnormalities and the protocol for referral of detected "positives" to the next level of management.

C) Instruct secondary screeners, such as pediatricians, family physicians, orthopaedists, etc., on early management principles, indications for x-ray examination and guidelines for follow-up.

II. The Scoliosis Research Society, having consulted with the AAOS on the Spinal Screening Program in order to seek advice and recommendations, should proceed to implement this program by appropriate and available means of financial support and more importantly, by means of the broad-based participatory support of this program by medical personnel and child health organizations.

III. The Scoliosis Research Society should provide an effective and multi-levelled package of information to facilitate the creation of screening systems in the nation's schools.

#### IMPLICATIONS:

Assuming that all 120,000 patients at each age level requiring observation and treatment were seen only by orthopaedists, it would increase the typical orthopaedists' work load by 12 new patients per year or one new patient per month every year. It would be less than that in reality since the majority of the 20,000 requiring treatment would be handled by orthopaedists who wish to manage scoliosis, and the other 100,000 would be distributed amongst family physicians and pediatricians who would follow the milder forms of scoliosis. There would also be considerable "leakage" that is, patients, who, although apt to benefit from medical attention, would not seek it for a variety of reasons. The net result is that, roughly estimated, only one new patient every two or three months would be added to the typical orthopaedists' work load. It should be emphasized that this would occur only after the system is fully operational, and not until after a considerable amount of instruction had been made available to the profession and the specialties most significantly involved. It should also be understood that massive screening programs have already been underway in certain areas without burdening the available orthopaedic resources.

Scoliosis can be detected on physical examination by trained non-physician personnel (physiotherapists, school nurses, physical education teachers) at a primary screening. Referral to a secondary

screeener, who may be a pediatrician, family physician, or orthopaedist, will allow for a decision as to the need for x-ray examination, etc.

While universal participation by these three groups of physicians will be sought through their national organizations, it is realistically recognized that such will not occur. Participation will, to a large extent, depend upon the individual physician's perception of the problem, and the Scoliosis Research Society will hopefully achieve a greater professional awareness of scoliosis and its consequences. The Scoliosis Research Society, --the accepted leader in scoliosis care, --recognizes the need to set the standards for spinal screening. It must also respond to the growing number of requests and demands for guidance. If the Scoliosis Research Society does not respond, then there can be only piece-meal, fragmented approaches to the problem which will only delay a program which is urgently needed now.

Merck Sharp and Dohme have offered to assist and collaborate with the Scoliosis Research Society in "packaging" the program which must be created so that three levels of instruction can be provided--one level directed at the general public so that parents and pupils can be alerted to scoliosis and the rationale for screening, --another level directed at the primary screeners so that appropriate standards of screening will be attained--and a third level at the secondary screeners so that they will be adequately informed regarding the program and the suitable process for follow-up care.

Merck Sharp and Dohme has experience in these types of public

and professional information programs, some of which were much larger in scope and much more difficult to organize.

Merck Sharp and Dohme is motivated, according to the best available information, by a desire to increase their stature in the public eye by assisting in a program designed for the general welfare and not for corporate gain. There will not, and in fact could not, be any product or service endorsement or identification by the parties to this relationship.

Since the Federal Government does not view scoliosis screening as one of the primary priority programs of its health and welfare departments, and since tremendous variability in interest exists in state and municipal health departments regarding this program, it is difficult to work exclusively with governmental organizations. Certain charitable foundations have been approached for assistance previously without success, but it now appears that the Easter Seal Society is quite interested in utilizing the material provided by the Scoliosis Research Society and Merck Sharp and Dohme for its scoliosis screening activities. This society's interest has been judged, at this point, to be very desirable. The Easter Seal Society understands that the Scoliosis Research Society must be available to assist all competent screening groups; in a like manner, the Scoliosis Research Society understands the present determination of the Easter Seal Society to embark on this screening program, and it is to be preferred that this be done with the leadership of the Scoliosis Research Society.

This program should be viewed as an excellent opportunity for an



international medical organization and private industry to collaborate with local groups in creating a service designed to provide definite benefits to the general population. At a time when the medical profession is besieged on many sides, this program can provide one demonstration of medicine's true dedication to preventive medicine.

#### PROGRAM PROJECTIONS:

The Scoliosis Research Society has allocated a modest budget for the development of the substance of the protocol and is not seeking financial support (although it certainly would not refuse donations to help to achieve its goals).

Merck Sharp and Dohme has tentatively dedicated a major budget to "package" the text material provided by the Scoliosis Research Society. Due to the urgency perceived by the Scoliosis Research Society on this matter, it has also been proposed that, despite the inability, at this late hour, to request program time or exhibit space at the American Academy of Orthopaedic Surgeons' Annual Meeting at Las Vegas, an informational luncheon be organized to serve as a "kickoff". Invitations would be sent to Academy members who, it is deemed, would be effective participants in developing grass-roots support for the program. This might include representatives from the AAOS Board of Directors and Board of Councilors, the Scoliosis Research Society, and other AAOS members known for their expertise and involvement in pediatric and adolescent orthopaedics. Merck Sharp and Dohme has agreed to sponsor this luncheon and has also agreed to devote a portion of its space in the

technical exhibits area to an advance announcement regarding the Spinal Screening Program and where individuals could indicate their interest in the Program.

ACTION REQUESTED:

It is simply hoped and requested that the Board of Directors will endorse the concept of the Spinal Screening Program, enlighten the membership of the American Academy of Orthopaedic Surgeons through its publications of the goals and methods of the Program and encourage support for the program by the membership of the American Academy of Orthopaedic Surgeons.

Respectfully submitted,

A handwritten signature in blue ink that reads "William J. Kane, M.D." in a cursive style.

William J. Kane, M. D.  
Chairman, Education Committee  
Scoliosis Research Society