MISSOURI MINUTES
ORVIL SIKES, R.T.
Bonne Terre, Mo. 63628

RETURN REQUESTED

The Missouri Minutes

"TO LIVE AND GROW AND GROW BETTER"

OFFICIAL PUBLICATION

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MISSOURI SOCIETY OF RADIOLOGIC TECHNOLOGISTS

Affiliated with the American Society of Radiologic Technologists

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Material for publication should be submitted to Orvil Sikes, R.T., Bonne Terre Hospital, Bonne Terre, Missouri no later than 10th of month preceding publication.

Please feel free to contact this publication at any time. Your opinions, criticisms and suggestions are appreciated.

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You are Invited

to attend the

33rd I.S.S.R.T. CONVENTION

OCTOBER 10 - 12, 1968

AT

SHERATON ROCK ISLAND

MOTOR INN

ROCK ISLAND, ILLINOIS

THE PRESIDENT SPEAKS

Dear MSRT Members,

Several important events have taken place since our general meeting in Kansas City last May.

Although an unusually early start was made in preparation for the 1969 Convention, Mr. Eddie Terril, R.T., Convention Chairman, found that all suitable accommodations in Springfield were reserved for the tentative date we had chosen. Since then, Mr. Terril has requested that the date be changed to May 22, 23, and 24. His request was reviewed and approved by the Executive Committee, as provided by our bylaws. I've met several times with Mr. Terril and other members of the Convention Committee and they have made a fine start on a very big job.

During our last meeting of officers and the Executive Committee it was decided that the state officers should be available to meet with any local District that request a visit. Any District wishing to have an MSRT officer address their local meeting should contact the State President.

The Nominating Committee has been appointed, and anyone wishing to nominate an active member of our Society as an officer for the coming year should contact a member of the committee. They are Ronald Anderssen, R.T., Chairman, Gerald Casey, R.T., and Judy Foeste, R.T.

The Convention City Committee has also been appointed, and now is the time for local districts to consider hosting the 1970 State Convention. Districts wishing to make a bid should contact Mary Di Martino, R.T., Chairman, or Laura Lee Groves, R.T., member.

I have had splendid cooperation from the various committees, and the 1969 Convention promises to be one of the best ever. You should plan to attend and have a more active part in the organization that represents Radiologic Technologists in Missouri, as well as the nation, through our affiliation with the American Society of Radiologic Technologists.

WARREN OTT, R.T.

MINUTES OF SPECIAL MEETING OF OFFICERS and EXECUTIVE COMMITTEE M.S.R.T.

The meeting was called to order by the president Warren Ott, R.T.

A motion was made by Orvil Sikes, R.T. that a Mailing Permit be purchased by the Missouri Society of Radiologic Technologists to be kept with the Missouri Minutes, for the Missouri Society Needs. There was a second by Ruth Hess, R.T. Motion carried.

A motion was made by Ruth Hess, R.T. to adjourn the meeting. This was seconded by Mary Di Martino, R.T. The meeting was adjourned at 3:00 p.m.

JEAN DETRING, R.T.
Secretary, M.S.R.T.

FACIAL BONES

(Editor's note: Steve Meadows, R.T., presented this essay at the 1968 V.S.R.T. Convention. It was judged superior over competition from other graduate technologists in the state).

In our modern, high speed world, there is an increasing number of accidents; some fatal and some near fatal. We as professionals in the paramedical field feel the end results of these near fatal accidents. Among the ever growing injuries sustained in these high speed crashes are those to the facial bones.

In radiography of the facial bones it is well for us to review the anatomy of this complex structure. There are fourteen bones comprising the visceral cranium. Each bony part has its own function and is susceptable to different injuries due to its location. Because of the compactness of facial structures, many injuries intertwine through many parts.

Through the years there have been many views devised for visualization of the facial structures. Some of these views are named for the projection, such as the lateral, and still others are named for the person who perfected the view, such as Water's. The recommended and mostly widely accepted routine views are:

1. The modified Pa Caldwell in which the median plane is perpendicular to the film and the central ray is directed caudally to form a fifteen degree angle with the baseline.

2. The Water's projection in which the median plane is perpendicular to the film and the head is tilted back so the central ray forms a thirty-seven degree angle with the base line.

3. Lateral views of the facial bones are done with the head in the true lateral position, centering to the upper pre-molar region.

Many times routine views are used to screen the facial structures.

If clinical history and routine views are suggestive of fractures or other pathology, we are quite frequently required to obtain additional views.

These additional views may include lateral obliques of the mandible in the case of fractures of the angle and ascending ramus of the mandible, basal views and exaggerated Townes in the case of suspected fractures of the zygomatoc arch, Laws and/or Schullers in the case of pathology to the tempero-mandibular joints. These views are all basically divided from the routine facial views. For instance, the Schullers projection is a twenty-five degree angle variation from the straight lateral. Tomography may also be added to these additional views. Tomography works on the principal of a fixed fulcrum and movable beam. It is very valuable in the case of facial injuries because it enables you to see the internal structures of the face without the normal superimposition of overlying structures. The one disadvantage of tomography is that it is a very time consuming procedure.

Serious injury to the facial bones or additional injuries to trunk and limbs may necessitate a variation in reverse of the posterior-anterior technique.

One of the most common injuries, or fractures to the face are those to the anterior maxilla and orbital floor. These injuries have been a problem to technologists and radiologists alike for many years. Due to the superimposition of the facial structures in the lateral projection, the only alternative has been to tomogram these structures in this projection. As mentioned before, this is a very time consuming examination and also many hospitals do not have the equipment for this.

In the past few months, I have been working with the problem of how to visualize these structures in the lateral projection without super-

imposition. In the process of this I have devised a view in which we may visualize the orbital floor and anterior maxilla free from overlying structures in the lateral projection. As you know these two structures are very similar to two sides of a triangle in lateral projection. This triangle shape may be retained with the head rotated slightly. In this projection the patient is prone with the chest elevated slightly by the means of a positioning sponge. The head is then rolled forward so that the median plane forms a 15 degree angle with the film. Then, in turn, the face is rolled down toward the film so the coronal plane also forms a 15 degree angle with the film. The central ray is directed perpendicular to the film passing through a point one inch in from the canthus of the eye, on the cantho-meatal line. The side of interest is up and is projected above and away from the other overlying structure. I have visualized fractures to these areas with this view that could not be visualized on any other routine view. I, as well as my employer, find this view very helpful. In many instances, with this view and a Waters view, tomography may be eliminated.

To enhance the value of this view, which I like to term the Meadow's view, it may be done in stereo. This view may or may not be used as a routine, but it may certainly, in many instances, be done in place of tomography. The view is versatile and may be done in reverse or may also be done cross-table.

Radiography of the facial bones, to many, can be a very alarming and time consuming examination. I feel sure that more than one radiologist has lost a little hair trying to evaluate incomplete examinations of the facial structures. Radiography of the facial bones does present its problems but it is up to you and me, the technologist, to get a complete diagnostic examination. All this can be made much more simpler if we further familarize ourselves with the bony facial anatomy and the views with which to project them. With proper technique the ultimate end can be only one thing—BETTER AND MORE DIAGNOSTIC EXAMINATIONS.

U.S. SENATE TO ACT

Washington D.C.—September 20, 1968 the United States Senate met to take action on Bill H.R. 10790.

H.R. 10790 is a bill with the intent to regulate manufacturing of radiation equipment. Section 360G of H.R. 10790 is an amendment proposing advisory standards for training and licensing of Radiologic Technologists. An enactment will give impetus to state licensure without enforcement of national uniform standards. It does not incorporate federal regulated minimal standards proposed by the American Society of Radiologic Technologists.

The Missouri Society of Radiologic Technologists has pledged support of the American Society action concerning federal regulation.

With the limited time alloted an extensive amount of effort has been utilized in informing the membership of the Missouri Society of the necessity of our unified opposition of Section 360G to be forwarded in writing to both Missouri Senators.

Missouri Society Officers have communicated with the Senators both by telegram and letters requesting deletion of Section 360G from H.R. 10790 and support establishment of federal minimum standards of training as the proper means of reducing unnecessary radiation exposure for medical purposes.

Congressional action of the above will be reported in the December issue of Missouri Minutes.

By the time this is printed you will have received notice from the executive committee urging you to contact your Senators. This action concerns your future and my future. Lets stand behind the M.S.R.T. in this matter.

MINUTES OF OFFICERS AND EXECUTIVE COMMITTEE MEETING

August 4, 1968

CALL TO ORDER:

The meeting was called to order at 11:00 a.m. by the president. Warren Ott, R.T. Mr. Ott immediately turned the meeting over to Mrs. Tolen and Mr. Leslie Wilson.

Mrs. Tolen spoke on the new procedure of balloting and changing of the bylaws of the American Society of Radiologic Technologists. Mr. Leslie Wilson spoke on Legislature and State Licensuring.

A motion was made by Clair Vincent, R.T. that the officers of Missouri Society of Radiologic Technologists give a vote of confidence and their support to the officers of the American Society of Radiologic Technologists, for whatever action they think advisable on the House Bill HR-10790. There was a second by Glenda Bullinger, R.T. Motion carried. The minutes from the last meeting were read by the secretary, Jean Detring, R.T. Minutes were approved as read. The Treasury Report was given by the treasurer Darrell McKay, R.T. The balance on hand as of August 2, 1968 was $1,355.56.

COMMITTEE REPORTS:

Chairman of the Executice Committee, Glenda Bullinger, R.T., reported that AID had been contacted regarding the 5th District Resolution, but an answer had not been received at this time. Chairman of the Publication Committee, Orvil Sikes, reported that Dr. Brodeur's Lecture had been completed and had been in the hands of Mr. Roe for mailing since 7-17-68. A letter from Mr. Roe was read by the president which referred to the mailing of Dr. Brodeur's Lecture and also concerning his financial difficulties from the previous State Convention at Kansas City. Mr. Sikes also asked that the Society select a new Editor to replace him, after the next three issues of Missouri Minutes had been printed. There was a short discussion about Missouri Minutes at this time.

NEW BUSINESS:

The subject of application forms was then brought up for discussion. A motion was made by Glenda Bullinger, R.T., that new application forms be printed with the following corrections: Active Member would be changed to $5.00. Associate Members would be changed to $8.00. Student Members would be added at $2.00. A form number would be placed on the bottom of the applications which would be 150-68-69. The applications are to be printed by the secretary and mailed to the Membership Committee Chairman to be distributed to each of the six districts. There was a second by Ruth Hess, R.T. Motion carried.

The Convention Chairman, Eddie Terrill, R.T., reported that he had selected some of the technicians which were to head the Committees for the 1969 Convention. Glenda Bullinger, R.T., made motion that these technicians be approved and accepted. This was seconded by Clara Smith, R.T. Motion carried.

There was a discussion at this time concerning the Sante Memorial Lecture. Orvil Sikes made a motion that the speaker be selected by the Convention Chairman and Program Chairman and be approved by the Executive Committee and the President of the Missouri Society of Radiologic Technologists. There was a second by Mary Di Martino. Motion carried.

Glenda Bullinger, R.T., made motion that Ruth Hess, R.T., immediate past secretary, condense the minutes from previous meetings of the officers and Executive Committees taking out all reports referring to Convention and give them to the president to be placed in his files for future reference. There was a second. Motion carried.

A motion was then made by Orvil Sikes, R.T., that the next meeting be

held on November 24, 1968 at 12:00 at Columbia, Mo. This was seconded by Ruth Hess, R.T. Motion carried.

A motion was made by Clara Smith, R.T. that the meeting be adjourned. This was seconded by Ruth Hess, R.T. The meeting was adjourned by the president at 2:30 p.m.

JEAN DETRING, R.T.
Secretary, M.S.R.T.

X-Ray Protection - Self-Quiz

Courtesy U.S. Public Health Service
QUESTIONS — Circle the letter corresponding to the best correct answer.

1. If you increase the mAs by 25%, keeping the kVp constant:
   a. The X-ray output is decreased by approximately 25%
   b. The scatter exposure to the operator is decreased by approximately 25%
   c. The patient dose is decreased
   d. The scatter exposure to the operator is increased by approximately 25%
   e. The effective energy of the beam is increased

2. All other factors such as distance and shielding being equal, the best place for the operator to stand in order to minimize scattered radiation exposure from the patient is:
   a. Behind the patient
   b. Beside the X-ray tube
   c. At right angles to the primary beam
   d. Any place, since there is no scattered radiation to the operator
   e. Any place, since all positions have the same scatter rate

3. Which of the following is the present maximum permissible dose equivalent value for whole body occupational exposure?
   a. 1 mrem/week
   b. 10 mrem/week
   c. 10 mrem/year
   d. 100 mrem/week
   e. 100 mrem/year

4. Which of the following is the present maximum permissible dose equivalent value for gonadal occupational exposure?
   a. 1 mrem/week
   b. 10 mrem/week
   c. 10 mrem/year
   d. 100 mrem/week
   e. 100 mrem/year

5. Following termination of an X-ray examination:
   a. There are no longer any X-rays emitted or present in the room
   b. The patient continues to emit radiation for approximately 3 seconds
   c. The film is temporarily radioactive
   d. One should wait in the shielded booth for approximately 6 seconds for all the X-rays to disappear
   e. X-rays continue to leak out of the machine

6. All factors in a physical appraisal of a Caucasian patient and a Negro patient being identical, for a chest PA, following determination of kVp and mAs from a technique chart, you should:
   a. Decrease 2-5 kVp for the Caucasian patient
   b. Increase mAs 10% for the Caucasian patient
   c. Decrease mAs 10% for the Negro patient
   d. Increase 2-5 kVp for the Negro Patient
   e. Use the same exposure factors on both the Negro and Caucasian patient

7. As the kVp is increased and the mAs correspondingly decreased:
   a. The skin exposure is decreased
   b. The skin exposure is increased
   c. There is no change in skin exposure
   d. The film has increased contrast
   e. There is no change in film contrast

8. If after following the time - temperature recommendations of the manufacturer, the film is too dark:
   a. The film has been overexposed
   b. The patient has been overexposed
   c. The operator has been overexposed
   d. The kVp or mAs should be reduced
   e. All of the above

(Answer on page 21)

GUEST EDITORIAL

APATHY

Apathy is described by Mr. Websters dictionary as; a lack of emotion, a lack of interest, a listless condition or indifference.

How many of us display a lack of emotion in our work and our society?

How many of us show a lack of interest in the success of our organization, in the betterment of our profession?

How many sit in a listless condition when attending society sponsored events?

There are many who are guilty of indifference in their daily lives, not only on the job, but as citizens.

We must show emotion, interest, aggresiveness and concern in order to achieve success as individuals.

What we accomplish as a leader or as a minority member, af an organization such as ours, influences the future growth of our society and profession.

May I offer to you the following taken from the February 1968 issue of FUTURE/JCI WORLD.

Apply each statement to yourself and ask: Am I doing what I can for my organization?

1. Seldom, if ever, attend a meeting.
2. If you do, find fault with the work of the officers.
3. Never accept an office.
4. If asked to give your opinion, tell the chairman you have nothing to say, but say plenty after the meeting.
5. Do no more than is absolutely necessary. When others roll up their sleeves and help, howl that the organization is run by a clique.
6. Never vote. but shout that your opinion is never asked.
7. When a banquet is given, tell everyone that money is wasted on big noisy blowouts that accomplish nothing.
8. When no banquets are given, say the organization is dead.
9. Don't tell the organization how it can help you. If it doesn't help you, resign.
10. If you receive service without joining, don't join.
11. Look out for something wrong in the organization.
12. At every opportunity, threaten to quit and get your friends to quit.
13. When you vote to do something, go home and do the opposite.
14. Agree to everything said at the meeting; disagree with it outside.
15. When asked for information, don't give it.
16. Cuss the organization for incompleteness of information.
17. Get all the organization gives you, but don't give it anything.
18. Kick about the cost of membership, though the weekly cost to you is actually negligible.

CONCLUSION:

What can I contribute to the future success of our Virginia Society of Radiologic Technologists?

Kennth L. Jones, R.T.
Clifton Forge, Va.

Editors footnote: Change the name of the Society to yours, and you will get the message.

CLASSIFIED AD

"Registered X-ray Technician, male, to work with Public Health Service team traveling throughout United States performing health examinations on teenagers. Besides X-rays, technician will be trained to do special tests in audiometry, exercise tolerance, body measurements, EKG, etc. Team spends about four weeks in each location, including both urban and rural areas. Salary, $5,000 to $6,000, depending on experience, plus living allowance and travel expenses. Interested persons should complete **Standard Form 171** (available at any post office) and send to Mr. Charles Gallese, U.S. Health Examination Survey, Room 3529, HEW South Building, Washing, D.C. 20201."

GRID LINES FROM ANOTHER PRESIDENT

The American Society of Radiologic Technologists, as well as your State and Local Societies, needs the support of each and every Registered Technician for without this support the American Society, its Affiliates and Members may be forced into a licensure program that every clear thinking and informed Technologist knows we do not need or want.

Published herein is a report presented to the Senate Committee on Commerce by a member of the Executive Committee of the American Society of Radiologic Technologists. Please read this carefully and understand that the American Society DOES NOT support licensure but is formulating a Model Bill to be used by States who are faced with the unfortunate situation of licensure.

The undersigned has given much thought to licensure and has consulted numerous people about it, one of whom was Kenneth D. A. Allen, M.D., a pioneer in Radiology and Radiologic Technology. From this study and consultation the following conclusions were reached. Licensure would only tend to lower the standards of the Radiologic Technologist, standards that have been achieved through forty-eight years of work, study and education. Licensure would be an added expense to the Technologist because, for licensure to function, there ust be a Licensure Board which would be a ready prey to political discrimination, whereas licensing examinations and Boards may be manipulated to their desires. People who promote licensure are usually politically minded persons who are seeking jobs in the Statehouse in the State in which they are living. As stated before, we do not need licensure for we already are Nationally Certified, a certification which allows Technologists to move freely about the nation, including England and Canada, to seek employment. If State licensure is brought about, this freedom of movement would be curtailed. If we are to be forced into licensure, let it be controlled at the National level and follow the guide lines being sought by the American Society of Radiologic Technologists.

We as members, must not accept licensure unless it conforms to these policies.

Peter L. Madden, R.T. (ARRT)
President C.S.R.T.

EDITORIAL

EDUCATIONAL INCENTIVES

We, as normal human beings, possess the somewhat peculiar characteristic of "liking to be recognized" in one fashion or another for what we are, what we do, or what we have accomplished. It is a natural desire to be known.

Recall how you feel when, as a patient enters the X-ray room, his eyes are drawn toward your Registry Certificate, American Society and Missouri Society Certificates hanging on the wall, and with much pleasure you acknowledge his inquiry of, "Is this you?"

Those three pieces of paper assure this patient that a competent, professional person, one who is a skilled portion of the medical team, it to work with him. Your professional recognition has impressed him. This patient has complete confidence in you. To justifiably earn this respect and confidence, you must not lose your perspective, but must strive to keep abreast of the most recent advances in Radiologic Technology. Therefore, we have a definite obligation to fulfill to ourselves and to our future patients.

There are numerous articles printed in newspapers X-ray journals, emphasizing the need for advanced education in this era of rapid growth in the technical field, but just what motivates a person to sharpen his skills and broaden his scope of knowledge?

Naturally, much of this lies within the individual. Perhaps the most curious and fascinating part about human beings are the drives, needs, desires and interests that make them what they are.

Motives or incentives of the individual spur him to certain behavior and to seek certain goals. We find that when adults give their reasons for sharpening their skills they reveal that they are motivated by a considerable number and variety of purposes. Few adults pursue this course because of a single aim, although they usually have one or more dominant objectives.

Some individuals have a definite desire or craving for knowledge. All children are noted for wanting to know the why and how of everything. In many instances this inquisitive mind is never satisfied, but continues to strive for fulfillment as one grows to adulthood.

Then there is the ambitious person who has an ardent desire for accomplishment, a definite need to gain recognition by acquiring diplomas, certificates or degrees.

And there are truly dedicated people who broaden their scope of learning in order to aid mankind.

The possession or desire for money is the major modifier of motivation. In our day and time we cannot omit the financial rewards aspect of advanced education. We all know that the more advanced in knowledge we are, the higher position we can secure, thus the higher pay scale.

Let us touch briefly upon society's changing needs which are placing greater demands upon the entire medical profession.

As medical science progresses, a shortage of adequately trained professional people has developed. Most critical of all is the shortage of doctors. The population of the United States has increased two and one-half times in the last sixty-five years, but there are only twice as many doctors. And there are more people who can pay for and demand medical care, due to widespread insurance.

We find is necessary to spread the skills of the medical profession by passing on some of the chores. The nurse is now trained to do a task the doctor once did, and the aide is trained to do routine chores once done by the nurse. To the Radiologic Technologists special training in Nuclear Medicine has been instigated in order

to assist the radiologist in carrying the heavy work load.

In other industries, automation reduces the number of workers needed per product, but as medical research creates new technical jobs, more technologists are needed. It is difficult to name one medical occupation in which there is no shortage.

It is felt that the surest and quickest way to win recruits for the profession is through new, low cost and more accessible training. In the past the medical student was barred from Federal student loan assistance. Now the new Health Profession Education Assistance Act makes Federal loans available to medical students at low interest rates.

To attract the registered nurses needed, new educational opportunities have opened also. In the past, most nurses obtained their certification through a three year hospital course costing up to $2,500 yearly. Now, community colleges using the nearby hospitals as practice labs, offer two year nursing courses at nominal cost.

Our colleges are training students to become radiologic technologists, dental hygienists, hospital ward managers, dental assistants and other auxiliary workers. These courses are divided between classwork and on-the-job training in a hospital. The student earns a nominal fee during his in-service training.

Many are needed to fill positions in this broadening occupation of medical science. Consequently, few investments in education lead so quickly to well paid, responsible and satisfying work.

As certified Radiologic Technologists, how can we develop and cultivate those qualities which make us outstanding technologists?

To be successful, one must participate. The Missouri Society of Radiologic Technologists offers wonderful opportunities to keep abreast of the advances in our profession. As a member of the Society you will receive the Missouri Minutes, a professional journal which carries a wealth of information. You'll have access to new techniques, interesting features and news stories pertaining directly to you, a Radiologic Technologist.

You can attend the Missouri convention convening in Springfield, Mo. May 23-24, 1969, and take part in the functions of an organization dedicated to promoting the science and art of radiography.

PARTICIPATION IS A WORTHWHILE INVESTMENT. WE SHOULD ALL TRY IT. IT PAYS OFF A HUNDRED FOLD.

Glenda Bullinger, R.T.

CONVENTION NEWS

The next annual M.S.R.T. Convention will be held in Springfield, Mo. May 23-24, 1969. We are all busy preparing for this event. The program committee is planning scientific sessions which should prove to be stimulating and of educational value to everyone.

The entertainment committee has some very good entertainment planned for the convention.

We hope that all of you may be able to get away from the daily routine and can spend a couple of educational, and entertaining days with us. It will be you, the Technologists of Missouri, who will make our convention a success.

We hope to see all of you in Springfield in May.

EDDIE C. TERRILL, R.T.
Convention Chairman

Change, Moved or Moving

M.S.R.T. would appreciate receiving new address, preferably BEFORE you move, if possible. Send change of address to Jean Detring, R.T., 802 S. "A", Farmington, Mo. 63640.

ATTEND TECHNOLOGIST MEETING — Members of District 2 of the Missouri Society of Radiological Technologists meeting at Still-Hildreth Osteopathic Hospital in Macon, Missouri were: (row 1, left to right) Sister M. Armella, R.T., President of District 2, St. Elizabeth Hospital of Hannibal; Patrica Bradford, R.T., Secretary and Treasurer of District 2, and Sister M. Gabriel, R.T., of St. Francis Hospital in Marceline; Sandra White, R.T. of Samaritan Hospital in Macon; Patrica Hymes, of St. Elizabeth Hospital in Hannibal; (second row, left to right) Michael Gordon of Levering Hospital in Hannibal; Larry Kriver of Kirksville Osteopathic Hospital in Kirksville; Carole Tipton, of Samaritan Hospital in Macon; Vana Gordon, L.P.N., of the Psychiatric Unit of St. Mary's Hospital in Quincy, Illinois; Angie Hedges, of St. Elizabeth Hospital in Hannibal; and Henry Y. Cashion, R.T., Head of Laboratory Services at Still-Hildreth Osteopathic Hospital, host institution.

DISTRICT NEWS

DISTRICT 1

Our new officers of District 1 for the 1968-1969 year are as follows:

John Roe, President Children's Mercy Hospital; John Murray Vice President, St. Joseph Hospital; Evie Hughes, Secretary, St. Joseph Hospital; Carmen Sparks, Treasurer

Our first district meeting of the fall season of 1968 will be held September 10, St. Luke's Hospital, Kansas City, Mo. Galen Tice, M.D., will present a topic on his "experiences in India", along with slides. Everyone is cordially invited to attend.

EVIE HUGHES

DISTRICT TWO

District 2 (Northeast Missouri) of the Missouri Society of Radiological Technologists met at Still-Hildreth Osteopathic Hospital in Macon Thurs-

day evening (May 2). Presenting the program on "Psychiatry and Neuroradiology" was Dr. Paul Williams, Resident in Radiology at Kirksville Osteopathic Hospital, and Dr. C. Barton Hoyle, Resident in Psychiatry at Still-Hildreth Osteopathic Hospital.

The program and business meeting was held in the Pavilion by the lake on the grounds of the Macon Unit of the Kirksville College of Osteopathy and Surgery. Mr. Henry Y. Cashion, R.T., Head of Laboratory Services, represented the host institution. Following the evening meal, program, and meeting at the Pavilion, guests were escorted on a tour of the facilities of the psychiatric hospital. The next meeting will be a social function at Mark Twain Park, Hannibal, Mo.

Attending the District 2 meeting were: Larry Kriver of Kirksville Osteopathic Hospital; Sandra White, R.T., and Carole Tipton, of Samaritan Hospital in Macon; Patrica Hymes, Angie Hedges, and Sister M. Armella, R.T., District President of St. Elizabeth Hospital in Hannibal; Michael Gordon of Levering Hospital in Hannibal; Patrica Bradford, R.T.. District Secretary. and Sister M. Gabriel, R.T., of St. Francis Hospital in Marceline; Vana Gordon, L.P.N. of the Psychiatric Unit of St. Mary's Hospital in Quincy, Illinois; and Henry Y. Cashion, R.T. of Still-Hildreth Osteopathic Hospital in Macon.

DISTRICT FIVE

The 5th District Society of X-ray Technologists met at Burge Protestant Hospital in Springfield, Mo. on June 30, 1968 at 1:30 p.m. There were twenty-two members present. The minutes were read and approved: A letter of resignation was read from John O. McSweeny. Jerry Casey, the former Vice-President presided as the new president.

Warren Ott, President of the Missouri Society spoke on the advantages of belonging to the Missouri Society.

A discussion was held by Jerry Casey reviewing the highlights of the Missouri State Convention held in Kansas City in May. Mr. Casey also made the suggestion that a "Ray Bowl" be started in the 5th district.

A motion was made that we, the 5th district, have a meeting the last Tuesday evening of each month beginning the last Tuesday of August at 8:00 p.m. The motion was seconded and carried with a majority approval.

Rita Vestal, R. T. and Glenda Shipman, R.T., were nominated to fill the office of Vice President. A vote by ballot was held. Rita Vestal was elected.

Eddie Terrill, R.T., Chairman for the State Convention to be held in Springfield in 1969, gave a report on progress of plans and asked for volunteers for various committees.

A motion was made that the meeting be adjourned. Motion was seconded. Meeting was adjourned at 3:30 p.m.

NANCY HOLLAND, R.T.
Secretary

DISTRICT SIX

Southeast Missouri Hospital, Cape Girardeau, Mo., was host to the July meeting of Sixth District M.S.R.T. Twenty members were present. Ken Barrett, R.T., president of Sixth District, presented Harold Rapp, M.D., Radiologist of Cape Girardeau, Mo., as the guest speaker for the evening. Committee reports and a report of the M.S.R.T. Convention was given.

Following the program and business meeting refreshments were served by our hostess, Judy Foeste, R.T. A time of fellowship and conversing with fellow technologists concluded the evening. The September meeting will be at St. Francis Hospital, Cape Girardeau, Mo.

ANSWERS

1. Answer (d) If the mAs is increased by 25% while the kVp remains constant, the output of the machine is also increased by 25%. This means that the scatter exposure is also increased by 25%.

2. Answer (c) The minimum scattered exposure when all other factors are equal is at right angles (90°) to the scattering subtance, not by or behind the X-ray tube. This is because the patient scatters diagnostic X-rays mostly in a backward direction resulting in a greater exposure rate near the X-ray tube.

3. Answer (d) The present MPD's state that for whole body exposure, radiation workers should try to stay as far as possible below an average of 5,000 mrem/year or 100 mrem/week.

4. Answer (d) The present MPD's state that for gonadal exposure, radiation workers should try to stay as far as possible below an average of 5,000 mrem/year or 100 mrem/week.

5. Answer (a) As soon as the X-ray unit is turned off, all X-ray photons are gone.

6. Answer (e) Every exposure to a patient should be based on an individual examination and determination. You should not give a patient an increased exposure simply on the basis of race, since this would lead to unnecessary exposure to individuals.

7. Answer (a) As kVp is increased, the quality and hence penetrating power of the X-ray beam is also increased resulting in less interaction with the patient's skin and thereby less patient skin exposure.

8. Answer (e) If the film is too dark after proper development, then the film has been overexposed. Also, not only has the patient received unnecessary radiation, but the operator has received additional unnecessary scatter radiation. In order to reduce the density of the film, as well as to minimize exposure to the patient and operator, the kVp or mAs should be reduced.

WHAT IS A HOSPITAL?

The word HOSPITAL is derived from the Latin word HOSPES which means HOST. We should always remember that the patients are our guests and we are their hosts. The hospital is an eternal triangle of God, man and medicine. As good hosts, we invite the sick, the tired, and the poor to be our guests so they may be comforted and healed.

Inside the doors of the hospital lies a whole and completely different world. This world should show that there is goodness here, not a superficial one, but a true, sincere goodness. Hundreds enter our world daily as patients and visitors, and are often confused and bewildered by the hurrying and scurrying of the hospital personnel. Though everyone is busy, each of us should have time for a cheery smile and a friendly word. Isn't it the duty and privilege of the host to make their guests as welcome and comfortable as possible?

When a patient is admitted to the hospital, whether he realizes it or not, he is cared for by many people. Every employee of the hospital has an important job. Each department is dependent upon the other and no single department is more important than the other. No one department can function alone. This is a very important part of the beauty of hospital work.

There used to be a custom that when a guest was leaving, the host would invite all the household personnel into the front hall to bid the guest goodbye, and to hope that their services had made it possible for the host to have made the visit pleasant

and comfortable.

Are we not the servants of God, and is it not a duty and a privilege to serve God.

Too frequently we forget that each patient is an individual, and he is always to be treated as such. We have to realize that the patient's health and well being depends upon the kind of care we give them, and that the life of a patient—any patient—is a life of God's. There are times when the first cry of the newborn and the last gasp of the dying occur simultaneously. Still, we must realize the wisdom of God's plan in our daily affairs, for nowhere is God more present in everyday happenings than with the sick. They are his special children.

Anyone, when he is sick, need extra attention, love and understanding. It has been frequently stated that professional hospital personnel should not become emotionally involved with the patients. Isn't it one of God's laws that "thou shall love thy neighbor as thyself?"

The true hospital stands for the correlation of God, man and medicine. The giving of our skills and our comfort to the patient out of the love of God and fellowmen. If we accept these precepts, we have the great reward of knowing that we have had a part in making the patient's life a little easier and that he can enjoy life a little longer.

> "I was hungry and you gave me food; I was thirsty and you gave me drink; I was naked and you clothed me; I was sick and you visited me; I was in prison and you came to see me. I say to you, as long as you did it for one of these, the least of my brethren, you did it unto me."

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"THE LINK"

THE EMERGENCY TREATMENT OF REACTION TO CONTRAST MEDIA

by H. J. BARNHARD; et al.
ABSTRACTED FROM RADIOLOGY 91: 74-84, 1968

I. CARDIAC ARREST
- A. First Evalute Vital Functions
  - Respiration:
    - Look at chest wall and abdomen.
    - Is airway clear?
  - Cardiac status:
    - Feel for peripheral pulse
    - Listen over precordium. (Don't take time for BP cuff).
- B. Rate of Artificial Respiration
  - 15 to 20 per minute, one every third or fourth cardiac compression.
  - Preferably with O^2.
- C. Rate of Cardiac Compression
  - Adults, 60 per minute.
  - Infants and small children, 60 to 90 per minute.
- D. If Patient is Apneic or There Is Inadequate Exchange:
  - Establish airway by:
    - Position: neck hyperextended, chin forward, head to side if drainage desirable
    - Suction
    - Airways, nasal or oral
    - Endotracheal tube, if you are skilled in its use
    - Tracheostomy.
- E. Once Airway is Established
  - Artificial respiration by:
    - Mouth-to-mouth (mouth-to-nose)
    - Bag and mask or equivalent (Use O^2 when available)
- F. Cardiac Resuscitation in Adults
  - Patient on a firm surface
  - Operator at arm's length over patient
  - Heel of hand just above xiphisternum, other hand over first hand
  - Keep fingers off chest wall
  - Thrust 1½ to 2 in., 80-120 lb. pressure, prolong compression (0.4-0.5 sec.)
  - Sodium bicarbonate, 3.75 g promptly and every 5 min.
- I. G. Cardiac Resusciation in Infants and Children
  - Fingers interlaced behind back
  - Thumbs superimposed over midsternum
  - Apply "adequate" pressure.
  - Children—As age increases
    - Lower pressure point
    - Increase force.
- H. Criteria of Effective Cardiac Compression
  - Improved color
  - Constricted pupils
  - Spontaneous gasping
  - Swallowing
  - Movement of extremities
  - Recordable blood pressure of 90-150 mm Hg (systolic) with each compression.
- I. If Heart Beat is Restored and BP is Over 70 mm HG
  - Stop cardiac compression.
  - Start:
    - Aramine* 1.0 percent solution (10 cc vials), 5 to 10 cc in 500 cc saline or D5W.
    - Levophed* 0.2 percent solution (4 cc ampules). 4 to 8 cc in 500 cc saline or D5W.
    - *Titrate patient to his usual BP.
- J. If No Heart Beat in Three to Five Minutes
  - Atonic (70 percent of cases)
    - Adrenalin (1:1000) 0.2 cc or
    - Isoproterenol HCl (200/g/cc) 0.1 cc
    - p.s. 10 cc physiologic saline; inject into left ventricle; continue compression
    - May be repeated every three to five minutes.
  - Ventricular fibrillation (30 percent of cases)
    - Defibrillator
      - A.C.: 440 volts (220 volts in children) 0.25 sec.; electrodes at jugular notch and apex
      - D.C. 2.5 msec. impulse, 20 msec. after R wave; 80 to 400 watt seconds; electrodes below right clavicle and left 5th interspace MCL
      - If countershock fails, try adrenalin or isoproterenol as above

and repeat defibrillation.

II. ALLERGIC REACTIONS
- A. Allergic Reactions
  - Urticaria
  - Angioneurotic edema
  - Laryngeal edema
  - Asthma
  - Status Asthmaticus
  - Anaphylaxis; collapse may be preceded by convulsions.
- B. Treatment of Allergic Reactions
  - Adrenalin (1:1000), 0.3 to 0.5 cc subcutaneous
  - Benadryl (10 mg per cc), 25 to 50 mg I. V.
  - Prednisolone PO4, 100 mg I. V.
  - For asthma, also use aminophylline (25 mg per cc), 250 mg I. V. (slowly!)
  - For collapse, resuscitate as appropriate.

III. CONSIDER POSSIBILITIES OTHER THAN REACTIONS
- Cardiac tamponade
- Inadvertent injection into spinal canal
- Remember that
  - Myocardial infarction
  - Pulmonary embolus
  - Acute pulmonary edema
  - Hypoglycemia

  can occur after injections (but not necessarily because of them)

JD:ms

Drug*	Strength	Volume
Adrenalin	1:1000	1 cc ampule
Aramine	1%	5 cc ampule
Atropine sulfate	400 mg/cc	10 cc vial
Benadryl	10 mg/cc	10 cc vial
Ephedrine	25 mc/ cc or 50 mg/cc	1 cc ampule
Hydelrasol (prednisolone)	20 mg/cc	5 cc vial
Isuprel hydrochloride (isoproterenol)	200 mg/cc	1 & 5 cc ampules
Levophed	0.2%	4 cc ampule
Nembutal	50 mg/cc	20 or 50 cc vials
Sodium bicarbonate	3.75 g (44.6 mEq)	50 cc ampule
Vasoxyl	10 mg/cc	10 cc vial
Xylocaine (lidocaine)	1%	20 & 50 cc vials

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