BULLETIN

of the

Mahoning County Medical Society

Organized 1872

"If a man empties his purse into his head, no man can take it away from him. An investment in knowledge always pays the best interest."—*B. Franklin.*

"To study the phenomena of disease without books is to sail an uncharted sea, while to study books without a patient is not to go to sea at all."—*Sir William Osler.*

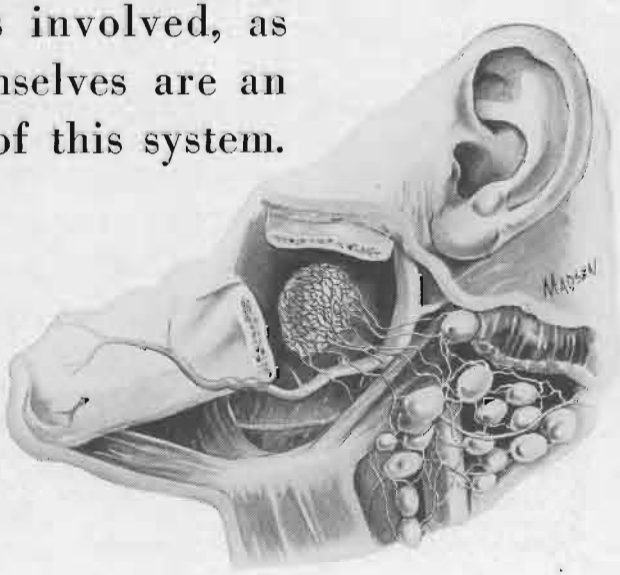
January 1937

Volume 7 Number 1

ΑΣΚΛΗΠΙΟΣ ΑΣΚΛΗΠΙΟΣ

In Tonsillitis

the lymphatic system of the entire throat is involved, as the tonsils themselves are an important unit of this system.



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THE MAHONING COUNTY MEDICAL SOCIETY BULLETIN

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CONTENTS

PRESIDENT'S PAGE

The retiring administration merits a hearty hand-shake and congratulations, for the splendid work that they have accomplished in the year 1936.

The committees have all been active, and in the final analysis, committee activity is the yard stick by which society progress is measured. Through these various committee activities, this society, in the last ten years, has assumed a place of *state prominence*. However, to maintain this enviable position we now hold, will require maintained activity and increased co-operation, not only of the various committees, but of *each member* of the society.

An organization, such as ours, that has accomplished what it has in the past, can be expected to continue its activity for better scientific medicine.

Your officers will strive to interpret the will of the majority, and initiate policy, where it is indicated.

This is a society of the physicians of Mahoning County, Ohio. Each of us has his duty to his patient, his family, himself, and his society.

"United we stand—divided we fall."

PAUL J. FUZY, M. D.

BULLETIN
of the
MAHONING COUNTY MEDICAL SOCIETY
JANUARY 1937

SOME PROBLEMS IN HAEMATOLOGY

By DR. W. H. BUNN

Our recent tour of duty on Ward Service was especially interesting because of several cases presenting some form of blood dyscrasia. We saw cases of leukaemia, purpura, secondary anemia of severe form, nutritional anemia and one most unusual case of pernicious anemia. We feel that sufficient time has elapsed since Doan and Wiseman brought us up to date in heamatology to warrant the choice of the subject for tonight's meeting.

Patently it will be impossible to cover the whole subject of heamatology. Consequently, the papers as listed on the program represent some phase of hematology in which the essayist is especially interested at the present time.

It is interesting to recall that from 1855, the time of Addison's description of pernicious anemia, until 1926 when Minot and Murphy reported their remarkable results with liver therapy that no advance had been reported in the cure of this disease. Castle's theory that pernicious anemia is in a sense a deficiency disease arising from a failure of some anti-anemia factor in the stomach during the process of normal digestion seems the best explanation to date. Achylia gastrica is most likely just an associated gastric dysfunction but is almost 100% a dependable sign.

Our recent ward case presented two unusual features: 1st—a tendency to bleed, having both hematuria and epistaxis; 2nd—generalized anasarca to a marked degree. His legs and face were grossly edematous and there was a large amount of ascitic fluid.

Small purpuric spots are not uncommon in pernicious anemia but free hemorrhage is quite unusual. We have not found, in a cursory reading of the literature, a case report of pernicious anemia with anasarca. Further search is being made. This patient had no free HCL. He responded promptly to intramuscular liver therapy, showing a prompt reticulocyte response and left the hospital with a satisfactory blood count.

A point worth stressing is the distinct advantage of intramuscular liver therapy over liver by mouth. The blood response is more rapid and better sustained. Liver extract, representing 100 gms. of liver, is reasonably priced and comes in 1 cc. am-

poules. It causes little pain and will often keep the blood count up if given once per week or even at less frequent intervals.

All symptoms of pernicious anemia are relieved by liver therapy except those arising from cord changes.

Addison's idiopathic anemia is simulated in some respects by anemia due to other causes. In several of these disorders the blood changes are essentially the same, but persistent achlorhydria and subacute combined degeneration of the spinal cord are not present.

A pernicious type of anemia is found in sprue.

Infestation by the broad tapeworm gives rise to a severe secondary anemia which may be confounded with primary anemia.

Aleukocythemic leukemia is a rare disease of the blood and blood-forming organs which taxes diagnostic ingenuity. The confusion in relation to Addison's anemia is due to the high grade degenerative appearance of the red cells, without abnormal leucocytes.

Severe secondary anemia of metabolic origin, that following hemorrhage associated with gastric carcinoma, or that resulting from acute or chronic non-specific infections, may present a blood picture resembling that of pernicious anemia. It is important to recall that secondary anemia may complicate pernicious anemia and vitiate the beneficial effects of the therapeutic measures adopted. This will be further discussed by Dr. Noll.

The anemias of syphilis, malaria, hookworm disease or hypothyroidism, splenic anemia, and the leukemias, are often confusing.

The former division of anemias into primary and secondary types hardly suffices to properly classify the anemias of infants and children. The occurrence of primary anemia in children is uncommon. Pernicious anemia is practically unknown before the teen age.

Anemia cannot be diagnosed at a glance with any degree of certainty, especially in children. The blood of infants and children varies considerably from that of adults in normal hemoglobin content and in cellular composition. At birth the infant normally has between 4,500,000 and 6,500,000 red cells per cubic millimeter of blood. Hemoglobin values above 100% are found (14 gm. of hemoglobin per 100 cubic centimeters of blood is taken as the average) and there is a moderate leukocytosis, the total white count frequently being between 10,000 and 20,000 cells per cubic millimeter. The platelets of the blood of new-born infants are about normal as judged by adult standards, i. e. about 300,000 per cubic millimeter. In the first few days following birth there is a remarkable change in the blood. Hemoglobin and red cells decrease rapidly so that by the end of the first week of life both are at or slightly below normal for the adult. The fall in hemoglobin is more rapid than that of the red cells. After the second week, 4,000,000 to 4,500,000 red cells and 85 to 95 per cent hemoglobin are considered normal.

Sickle cell anemia, formerly thought to be rare and confined to the Negro race, is now known to be a hereditary condition, not extremely uncommon and not confined entirely to Negroes. The term "sickle cell," by which this type of anemia is known, is derived from observation that, when a fresh preparation of blood from these patients is sealed in a moist chamber and allowed to stand, many of the red cells will assume an elongated, curved shape resembling the blade of a sickle. This tendency to "sickling" is very marked and may involve from 20 to 90 percent of all red cells. The etiology of sickle cell anemia is unknown. Several writers believe that some defect in metabolism is the underlying cause. Cooley is of this belief and he considers sickle cell

anemia, erythroblastic anemia, and hemolytic icterus to be related etiologically.

Erythroblastic anemia is thought to be limited to children of Mediterranean peoples. Most of the reported cases have occurred in Italians, Greeks, Sicilians and Armenians. The average age of onset is two years. The first signs and symptoms of the disease include a gradually increasing anemia, delayed growth, weakness, increased susceptibility to infection, and splenic enlargement. The appearance of children with this disease is characteristic. It has been remarked that they resemble each other more than they resemble their own relatives. All have a peculiar coloring due to the combination of severe anemia and mild icterus in a dark skinned person. All show a depression of the bridge of the nose and nearly all show a tendency toward slant eyes giving a mongoloid appearance. The prognosis in erythroblastic anemia is poor, but the disease runs a chronic course and the patient may live for several years.

Hemolytic icterus or hemolytic jaundice is often considered as a disease of the spleen. It may be properly classified with the constitutional hemolytic anemias since anemia is its most important manifestation. Like sickle cell anemia and erythroblastic anemia, hemolytic icterus shows a strong familial trend. As a rule anemia and jaundice are noted in infancy or early childhood. Examination shows icterus, anemia, palpable spleen, and in more severe cases the liver may be somewhat enlarged. Diagnosis depends on history and physical examination plus the demonstration of decreased resistance of the erythrocytes to disruption when subjected to hypnotic solutions. Red cells of a patient suffering from hemolytic icterus frequently are hemolyzed by 0.5% solution of sodium chloride and all cases show complete hemolysis above 0.4%. Treatment other than splenectomy is symptomatic.

Finally: Hemoglobin formation is not inseparably linked with red cell formation for we know that a normal red cell count is not always accompanied by a normal amount of hemoglobin. However, for practical purposes, and in the absence of exact knowledge concerning hemoglobin formation, we can assume that the two are closely related and that bone marrow depression will result in abnormal formation of both red cells and hemoglobin.

There was a practical point brought out at the recent Central Society meeting in experimental iron deficiency. It seems likely that iron deficiency in pregnant women may result in a diminished iron content of the new born. Apparently a normal iron reserve is important for normal hemoglobin formation during the first year of life.

Another point brought out at this meeting has to do with hematophoesis in myxoedema. Without offering an explanation the fact has been established that thyroid extract causes reticulocytosis in myxoedematous patients and that liver extract produces very little change.

NEWS ITEMS

Doctors McNamara, McCann and Herald presented a series of papers on the Sympathetic Nervous System at the November meeting of the Staff of Saint Elizabeth's Hospital.

Dr. C. S. Lowendorf has been elected to membership in the American Academy of Orthopaedic Surgeons.

The following officers for the year of 1937 were elected at the December meeting of the Staff of Saint Elizabeth's Hospital: Chief of Staff, Dr. F. W. McNamara; Vice Chief of Staff, Dr. J. B. Nelson; Secretary and Treasurer, Dr. Saul J. Tamarkin; Chief of Medicine, Dr. A. M. Rosenblum; Chief of Surgery, Dr. J. M. Ranz.

Doctor and Mrs. J. G. Brody are still on the sick list.

Mr. and Mrs. Harry Hartzell of Baltimore, Maryland, announce the marriage of their daughter Anita to Dr. T. K. Golden. Doctor and Mrs. Golden are at home at the Burke Apartments.

Additions to the Medical Faculty of Ohio State University School of Medicine include Dr. Sidney M. McCurdy, lecturer on industrial medicine.

Dr. Charles A. Doan becomes the new chairman of the department of medicine.

Dr. G. B. Kramer and Dr. R. B. Poling appear on the list of pathologists, as certified by the American Medical Association.

Dr. E. C. Baker spent the week of Dec. 7th in attendance at the Radiological meeting at Cincinnati. He presented a paper on the roentgenological recognition of Parathyroid disturbance.

MEDICAL GLEANINGS

In the *American Journal of the Medical Sciences,* Vol. 192, page 409, is an article entitled "Recent Work on the Tissue Changes in Vitamin 'A' Deficiency" by Elizabeth Chant Robertson, M. D., that is well worth the reading.

The October issue of *The Journal of Laboratory and Clinical Medicine* is given over to a symposium on Rheumatoid Diseases. The papers were read before The American Association for the Study of Prevention of the Rheumatoid Diseases held in Kansas City.

Both journals are on file in the Library at the South Unit.

Poliomyelitis continues to evade the efforts of the research works to provide a method of immunization. Recent summaries also point out that little, if any, protection can be expected of convalescent or immune serum. Kolmer's work with a rincinoleated virus has been quite generally discredited. There only remains as a measure against infection with poliomyelitis virus, the prophylactic treatment of the nasal passage during the period of endemicity. This is best accomplished by daily instillation of 4% Tannic acid, 4% Alum or Alum and Tannic acid. Consult the American Journal of the Medical Sciences, Vol. 192, page 436, for complete details.

Greetings from the President of the Ohio State Medical Ass'n.

Dr. H. E. Patrick,
Mahoning County Medical Bulletin,
Youngstown, Ohio.

Dear Doctor Patrick:

I should like to send greetings to the Mahoning County Medical Society and add congratulations upon the constant growing evidence of proper medical spirit that pervades your society.

The State Association is showing that it has found a rather fertile spot from which it can draw material for use in its new activities.

The real live, worth-while work for the future of medicine must be done in the county societies. The function of the State Association is that of unifying the work of the county units and unless the members of the county medical societies are awake to their needs and initiate forward steps, the State Association is left "on the limb"; so we are proud to place the Mahoning County Medical Society among those societies in the front rank of aggressive and interested component units from which the State Association derives its confidence and hope of giving more to its members as each year comes on.

Sincerely yours,

DR. E. M. HUSTON.

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of the

Mahoning County Medical Society

YOUNGSTOWN CLUB

Tuesday Evening

January 19th, 1937

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The HOUSE OF MAGIC

Through Its Interpreter

MR. ELLIS MANNING

of the Research Laboratories

of the General Electric Company

Schenectady, New York.

Mr. Manning will introduce his audience to such subjects as the following:

Irving Langmuir's work on Monomolecular films.

Recent work on gaseous discharges, with mention of the Sodium, the high and ultra-high pressure Mercury.

The Mercury fluorescent lamp.

Coryl Haskin's work on X-Ray Genetics.

The new recording Spectrophotometer.

NON-PENETRATING TRAUMA OF THE ABDOMEN

By FRANCIS W. McNAMARA, M. D.

(*Presented before the Mahoning County Medical Society, November,* 1936)

The receipt of this flattering invitation from your program committee to present a paper before this Society, has given me a lot of concern, both as to the choice of the subject matter, and also as to the amateurish position in which I find myself, in view of the excellent national talent that the Society has had the opportunity of enjoying in the last several years.

In this active industrial center, where many thousands of individuals are engaged in more or less hazardous occupations, and in these times when serious automobile casualties are becoming more numerous, a discussion of non-penetrating trauma of the abdomen might set forth some points of practical value. Peculiarly the majority of patients sustaining abdominal trauma, are children and the aged. Our industries offer such protection today, that employees are safer from this particular type of trauma during working hours, than during their hours of diversion. The automobile is the chief offender. The discussion will be limited to injuries of the gastro-intestinal tract. Some general consideration will be presented at first, and later more detailed descriptions of the picture presented by trauma of special organs.

Contusion of the abdominal viscera is caused mainly by blows, crushing forces, falls, compression between heavy objects, blunt objects traveling through space with some velocity, and recurring pressure from certain tool handles. The severity of injury depends on the amount of force exerted, the angle of impaction, and the condition of the abdominal muscles. The aged with weak abdominal and visceral musculature, may suffer severe visceral injury from slight trauma. The tense, expectant abdominal muscle of the athlete assimilates force with little damage. Conversely, sudden unexpected force applied to a lax abdomen, may cause fatal rupture of a viscus. A fall from some height with the patient landing upright, or a severe blow on the back may rupture the attachments of organs. A detailed history of the etiological factor is most important in determining the extent of damage inflicted. Injury to hollow organs is usually caused by compression of the viscera against some less yielding tissue, e. g.—usually bone—the ilium or the spine.

In diffuse impaction, as when the abdomen strikes a broad flat surface, the lesion may be caused by contusion, by bursting from within, or by the tearing of an attachment. Direct violence over a distended coil of intestine may cause rupture of the intestine from within. The stomach shows greater resistance than the intestines. When the stomach is injured, the lesser curvature suffers most, and the rupture is usually of the bursting type, that is from within.

Rupture of the small intestine occurs more often in its less movable portions—that is the duodenum, first portion of the jejunum, and the ilium. Likewise, rupture of the large bowel is more frequent about the right colon. Contusion and tears of the mesentery may produce massive hemorrhage first and later necrosis of the intestine.

The solid organs are ruptured less often than the intestine. Liver, spleen and pancreas less often than the kidneys. Organs softened by disease lacerate more easily than normal viscera. Severe contusion may rupture the gall bladder.

The signs and symptoms of intra-abdominal injury depend on—

(1) The amount of hemorrhage.

(2) The extent of peritoneal irritation.

In general symptoms and signs are as follows:

(1) *Shock* — slight or severe according to extent of injury. There is pallor, anxiety at first. Later in neglected cases, pallor or cyanosis, cold, clammy perspiration, apathy, dulled mentality, rapid pulse, lowered blood pressure, shallow respirations.

Pain—There is some generalized pain, but usually most acute at site of injury. In injury to the upper abdomen, pain is aggravated by the respiratory movements. If injury is slight, pain subsides in a few hours. Where there has been perforation of a hollow viscus, pain increases depending upon the fluid liberated. Leakage from the stomach, duodenum and jejunum cause the greatest degree of pain.

Nausea and Vomiting—Frequently present even in minor injuries. They are constant signs in injuries to the stomach and intestines, blood being present frequently when the stomach is injured. With extension of peritoneal irritation, there is an increase in vomiting.

Diarrhea—Is present when there is hemorrhage into the lumen of the bowel.

Fever — Temperature is low at first. When there has been exposure or marked hemorrhage, temperature may drop to 95 degrees. A valuable prognostic sign is the degree of response to external heat and treatment of shock. Those cases which do not respond rapidly indicate extensive damage and terminate fatally.

Pulse — Almost always increased from shock, hemorrhage, nervous anxiety. Sometimes in massive hemorrhage without extravasation of intestinal contents, the pulse will be slow for several hours, after which a sudden collapse may ensue, especially if the cavity is opened. A slow pulse is also present frequently in severe liver damage, especially when there has been rapid absorption of bile salts.

Respiration—Increased, particularly in upper abdominal injury. In shock the respirations are shallow, costal and the abdominal movements limited. Continuous rapid, superficial respirations are diagnostic of visceral injury.

Distention—Usually absent early unless there has been diffuse hemorrhage, then it will be moderate. If there is perforation with air in the abdominal cavity, distention increases. Neglected cases show marked degree of distention and offer poor prognosis.

Tenderness—In badly shocked patients tenderness may be slight even in the presence of grave injury. As a rule tenderness is most acute at the site of injury. Later there is generalized tenderness.

Rigidity—Almost always present. Early it is limited to the area of injury. As peritoneal irritation develops, it becomes general. If muscle spasm is absent at first, and later manifests itself, serious injury is indicated. This is also true of late appearance of localized tenderness.

Percussion—Extensive hemorrhage may be elicited by shifting dulness in the flanks. A fluid wave is difficult to ascertain even in massive hemorrhage. It can only be found late, when the abdomen is filled with peritoneal exudate and intestinal contents. If free air is present, liver dulness may be obliterated. This is never a constant sign. Early, when the diagnosis should be made, percussion is of little value.

Pelvic signs—If on rectal examination, one finds definite signs of tenderness in the pelvis, it indicates the presence of free fluid or peritoneal exudate.

Hematology — In the presence of hemorrhage in the abdominal cavity, there will be progressive increase in leukocytes. Leukocytes respond rapidly to irritating elements from contents of hollow viscera. The hemoglobin and red cells are reduced.

X-Ray Diagnosis—X-ray examination can usually demonstrate pneumo

peritoneum. A fluid level may be seen when both fluid and air are present. X-ray examination should be made as soon as shock has subsided; at once if suitable portable apparatus is available.

Unfortunately there is no sign, symptom, or combination of these, sufficiently constant to indicate the severity or the exact nature of the injury. Exploratory laparotomy is the safest diagnostic aid for effective treatment.

Trauma of Stomach—Abdominal trauma, unless of the more severe crushing type, rarely causes more than a hematoma of the stomach wall. Direct blows are more apt to cause injury to the overlying small intestine. Anatomically the projection of the stomach on the abdominal wall presents a small area of vulnerability. Crushing injuries of the stomach severe enough to cause laceration or rupture, are most always associated with fatal injury to adjacent organs—the chest and its contents, the duodenum, liver, spleen and pancreas. Extensive hematemesis is the only clear symptom, and the only indication for surgical interference. In contusion of the stomach there may be vomiting of blood streaked mucous. Usually the situation clears up rapidly without interference. Gastric ulcer has been reported as a sequel of trauma. It is extremely doubtful if trauma plays any part in the etiology of ulcer.

Traumatic Perforation of Peptic Ulcer—It is possible that trauma of a stomach overdistended with gas or food may cause a blowout at the site of an ulcer. In my limited experience, I have never seen a case of this kind. However, we do know that sudden muscular effort may cause perforation of an ulcer, and strangely enough, where there can be no previous ulcer history found.

Traumatic Appendicitis—Many authorities agree today that there is no such entity. Sloan thinks it is a possible predisposing cause but one hard to prove. Kelly cites fifty cases of so-called traumatic appendicitis. In forty of these there was a previous history of pathology in the appendix. It is well known that pathologic changes may be present in an appendix without evidencing any clinical symptoms. Acute appendicitis following kicks or blows in the right lower quadrant has been reported. The gross and microscopic pathologic changes being hard to differentiate between appendicitis arising spontaneously, my own impression is that non-penetrating trauma is not an important causative factor in appendicitis.

The Liver, Gall Bladder, and Bile Ducts—Rupture or laceration of the liver occurs seventeen times more often than injury of the spleen. It is often associated with crushing injury to the right thorax. It is just as often caused by direct violence to the right hypochondrium or epigastrium. It is more common in youth, due to the large size of the organ and its soft glandular consistency.

Lacerations more frequently effect the convex surface, usually extending from before backward, often stellate in character. There may be extensive laceration of the liver substance with the capsule intact, with the formation of subcapsular hematoma. Rarely there will be central lacerations deep in the substance of the liver. There is gross internal hemorrhage, marked shock, local and radiating pains and muscular rigidity. The most characteristic symptom is rapidly ensuing anemia. Hemorrhage is largely venous in character. Blood may accumulate under the diaphragm; usually it extravasates down along the right colon and into the cul-de-sac. Pronounced bradycardia is significant. Radiating pain to right shoulder is present. The pulse is small and the blood pressure low. With the signs of hemorrhage there may be a rise in temperature, differentiating this condition from the

picture of shock caused by rupture of a hollow viscus.

Late symptoms are jaundice, the presence of bile pigments in the urine and sometimes glycosuria. The diagnosis of hemorrhage following trauma in the region of the liver warrants exploration.

SPLEEN — Contusion and rupture of the spleen are generally caused by trauma transmitted directly to the spleen through the thorax or abdominal wall. Indirect violence caused by trauma to some distant point of the body have been reported, as a fall on the right side of the abdomen. A spleen enlarged and softened by disease is more prone to rupture. Instances of rupture without trauma, or following a very slight trauma, have been observed. There is no characteristic sign or symptom. There is the usual picture of hemorrhage. The period of shock is usually of short duration and clears up before the period of hemorrhage begins. In some cases there is, after the recovery from shock, an interval of improvement before the onset of secondary relapse.

The latent period. During this period the patient has some abdominal pain and will present signs of moderate abdominal injury, but not serious enough to cause alarm. Then comes the secondary hemorrhage which may be fatal.

The local signs resemble peritonitis. There is generalized or localized pain in left hypochondrium and pain referred to left shoulder may be present. This is not pathogonomic as it is present in many other conditions. In the early stages there is often leukocytosis without diminution in red cells or hemoglobin. Definite diagnosis is difficult to make.

THE PANCREAS — Is occasionally injured by the application of considerable force to the abdominal wall, crushing the organ against the lumbar vertebrae. Extreme shock is the immediate result. Marked tissue destruction is caused by the discharge of pancreatic juice into either the greater or lesser peritoneal cavity. There are no definitely characteristic symptoms. If the patient recovers from the immediate effects, a retro-peritoneal hematoma or a pancreatic cyst may follow.

GALL BLADDER AND BILE DUCT — Rupture of the gall bladder alone is rare, unless it is greatly distended. The gall bladder can withstand 100 lbs. air pressure before rupture. If the gall bladder is ruptured or lacerated, its contents are evacuated into the peritoneal cavity. There is moderate degree of shock and sign of slight hemorrhage. Only the bile contained in the gall bladder will escape. In rupture of the bile ducts, there is the extravasation of a considerable amount of bile, and early appearance of jaundice. A biliary peritonitis occurs, not always of the sterile type. If infection exists in the gall bladder or ducts, septic peritonitis results.

MORTALITY RATE IN ABDOMINAL TRAUMA — This depends of course on the severity of the injury and the number of organs involved. It increases directly with the extent of time elapsing between the onset of injury and the institution of treatment. Complete traumatic rupture of the stomach presents the highest mortality — almost 100%.

Rupture and lacerations of the liver, if extensive, cause death from hemorrhage in over 75%.

Extensive rupture of the colon causes death from peritonitis in 60%.

Rupture of the small intestine and rupture of the spleen show more favorable results. Rupture of the spleen, if treated early, and if the organ is not enlarged by previous disease, shows a mortality not over 25%.

Treatment of laceration of the small bowel give the best result, unless there has been extensive separation of the mesenteric attachment. The mortality may be as low as 15%.

PHARMACY SPEAKS TO MEDICINE

By O. U. SISSON,
Chairman of the Interprofessional Relations Committee of the N. A. R. D.

On December 7th, in Detroit, Mich., a joint meeting was held between the Wayne County Medical Society and the Detroit Retail Druggists Association. Prominent speakers addressed the meeting, stressing the close relationship between medicine and pharmacy. Prior to a lecture by Dr. Bernard Fantus of Chicago, Mr. O. U. Sisson, chairman of the Interprofessional Relations Committee of the N.A.R.D., spoke briefly of the cooperation necessary between the two professions. He called attention to the parallel lines along which both professions run, the main point of demarcation being that of diagnosis.

The accompanying extracts are presented in the hope that more meetings of this kind may be arranged, as they cannot help but strengthen the ties that bind these two great professions.

To see medicine and pharmacy eye to eye is indeed a pleasure and I hope this program will introduce you to some of the more important features of the New U.S.P. & N.F. These books are the crystallization of over 200 years of continuous research and experiments. Both physician and pharmacist have ever been pioneers in progress and prove the truth of Dr. Fox's statement, "Science shall replace guess work."

Medicine and Pharmacy are actually dependent upon each other for a successful service to the sick. It is not a case of individualism. One man or groups of men in either field could never accomplish the benefits that organized Medicine and Pharmacy have developed to the present day. We must realize that we are just individual spokes in a great wheel, and that by each other's help we support this great structure.

Unfortunately, the curriculum of medical schools gives students only 2% of pharmacology (which is not synonymous with pharmacy), yet the responsibility of that item of medicine to the laity is about 20%. A vacuum, therefore, of 18% exists and it is within this 18% that quackery and other wily systems of advertising prey upon credulity, exploiting medicine and pharmacy to the public with little or no consideration for the welfare of either, to such an extent that it is a disgrace to modern civilization.

One of the physician's greatest and most effective weapons against disease is a broad knowledge of therapeutics. A wide range of information concerning medical products of proven therapeutic value, covering several decades, now constitutes part of the U.S.P. & N.F. American medical men should be truly grateful for the signal contributions in the field of medicine which are being definitely emphasized by 24 symposium releases from members of the revision committee. They are now regularly appearing in the American Medical Association Journal, beginning with the issue of September 5th, 1936.

Gentlemen, you are profoundly educated, know all about the romance of medicine; you are trained in the theory of war on disease and possess the instruments. All of these are available, but you do not sufficiently well know your ammunition—which is pharmacy, a very practical art.

Pharmacy has no quarrel with pharmaceutical manufacturers nor with anyone doing original research work, but pharmacy does resent the exploitation of preparations, at shameful prices, upon which little or no research work has been done, e. g., mandelic acid, the mixed benzoates and many other simple and complex proprietary articles. Success will accrue and the public may be benefited only when therapeutic tests have proved the value of animal experimentation. This must be done because individual physicians have no endowments with which to carry on their research.

You realize as well as I that there is something wrong with medical economics. I have only one suggestion to make, e. g., that since prescriptions are priced upon a cost-plus basis, in

the use of official preparations you are saving your patients from 10% to 40% on each prescription if you will remember to prescribe drugs by their official names instead of coined substitutes.

You realize we have new standards which are really wonderful products, and it is the duty of medicine to know more of them and to use them, especially the palatable vehicles as for example:

Syrup Licorice for Bromides

Syrup Cacao Prep. for Coal Tar Products

Syrup Cinnamon for Iron and Ammon. Cit.

and many others too numerous to mention.

In the past six years I have heard many doctors speak with frank criticism and practical suggestions. This, I believe, comes from their knowledge and understanding of your troubles, and by noting how their difficulties parallel those of pharmacy, a better relationship is being developed.

—Reprint from *Chicago Medical Society Bulletin.*

SECRETARY'S REPORT

It is the appropriate time to begin anew in our activities. The ensuing year no doubt will bring out many variables in the management of the society. It seems logical to expect some innovations in medical affairs inasmuch as the social phase of management constantly demands a hearing. Due to the betterment of financial conditions in the country there is some danger of a renewal of lethargy on the part of practitioners thereby creating a fertile time for socialists and cultists to make generous gains.

The important question of caring for venereal cases continues unsolved by our local profession. It does seem that if this is a burning issue there should be enough conviction to find a way in not too great time. Disease progresses while the waiting is going on.

The dues for the year 1937 have been coming in fairly well. Too many members have not paid to date. It is well to be reminded that members are delinquent if dues have not been paid by January 1st, 1937. It is now fitting and proper to remit $12.00 to the secretary. This will assure your State dues, AMA dues and the State Medical Defense Protection. No member can afford to permit his dues to lapse. Any one who has not paid for the year 1936 should hasten to do so.

The State Medical Society has been attracted sufficient to note the worthy activities of the following men, viz.: Dr. John Heberding, Dr. O. J. Walker and Dr. W. K. Stewart. These physicians have thereby been honored by appointments to positions in the State Medical Association.

The following applications for membership to Mahoning County Medical Society were acted on favorably by Council at the last meeting:

Dr. Samuel Wood Weaver
Dr. Joseph F. McGowan
Dr. Myron Harry Steinberg
Dr. Amos Boyer Sherk
Dr. David H. Levy
Dr. Carl Arthur Gustafson
Dr. Martin Edward Conti.

Should there be any objections to any of these applicants, present objections in writing to the secretary of the Society within 15 days.

ROBERT B. POLING,

Radio Talks

Dec. 7, 1936—Dr. M. I. Berkson: "Gastritis."

Dec. 14, 1936—Dr. E. J. Reilly: "The Doctor's Scotland Yard."

Dec. 21, 1936—Dr. C. A. Gustafson: "Holiday Follies."

Dec. 28, 1936—Dr. C. A. Gustafson: "The Quick Lunch."

PERSONAL ITEMS

Dr. Paul J. Mahar announces to his patients and friends that at the present time he is located in his new office at 2009 Hillman St. Phones: Office 34434; Res. 24819.

Dr. Verne Goodwin and Miss Ruth Huxley—now Mr. and Mrs.—will make their home in New York City for the next two years until Dr. Goodwin has completed his studies in eye, ear, nose and throat.

Dr. Stanley Meyers—former resident of Youngstown Hospital—now of Massachusetts General Hospital, spent the Christmas holidays with friends here in Youngstown.

Dr. Joe Keogh of Massachusetts General, also spent X-mas holidays in Youngstown.

Dr. David James, of Women's Hospital, Detroit, Mich., was a recent welcome visitor in our fair city.

Dr. A. E. Brant is spending the holidays in the East.

Dr. M. H. Bachman has removed his office to the Central Tower from North Phelps Street.

Regular staff meeting to be held at the Youngstown Hospital, Jan. 5th, 1937. Dr. W. B. Turner and staff are in charge of the program.

PAIN

1) History and Physiology — Dr. Weller.

2) Anatomy of Sympathetic Nervous System — Dr. Gustafson.

3) Technique of Injection of Nerves for Control of Pain — Dr. Sedwitz.

Motion pictures of the technique of control of abdominal and lumbar pain, was an added feature.

Old Way . . .

CURING RICKETS in the CLEFT of an ASH TREE

FOR many centuries,—and apparently down to the present time, even in this country—ricketic children have been passed through a cleft ash tree to cure them of their rickets, and thenceforth a sympathetic relationship was supposed to exist between them and the tree.

Frazer* states that the ordinary mode of effecting the cure is to split a young ash sapling longitudinally for a few feet and pass the child, naked, either three times or three times three through the fissure at sunrise. In the West of England, it is said the passage must be "against the sun." As soon as the ceremony is performed, the tree is bound tightly up and the fissure plastered over with mud or clay. The belief is that just as the cleft in the tree will be healed, so the child's body will be healed, but that if the rift in the tree remains open, the deformity in the child will remain, too, and if the tree were to die, the death of the child would surely follow.

*Frazer, J. G.: The Golden Bough, vol. 1, New York, Macmillan & Co., 1923

It is ironical that the practice of attempting to cure rickets by holding the child in the cleft of an ash tree was associated with the rising of the sun, the light of which we now know is in itself one of Nature's specifics.

New Way . . .

Preventing and Curing Rickets *with* OLEUM PERCOMORPHUM

NOWADAYS, the physician has at his command, Mead's Oleum Percomorphum, a natural vitamin D product which actually prevents and cures rickets, when given in proper dosage.

Like other specifics for other diseases, larger dosage may be required for extreme cases. It is safe to say that when used in the indicated dosage, Mead's Oleum Percomorphum is a specific in almost all cases of rickets, regardless of degree and duration.

Mead's Oleum Percomorphum because of its high vitamins A and D content is also useful in deficiency conditions such as tetany, osteomalacia and xerophthalmia.

Mead's Oleum Percomorphum is not advertised to the public and is now obtainable at drug stores at a new economical price in 10 c.c. and 50 c.c. bottles and 10-drop capsules.

MEAD JOHNSON & COMPANY, Evansville, Indiana, U. S. A.

The Most Important YEAR of a LIFETIME

Prominent men frequently retain a personal physician to help them preserve their health. But the most important time to have the physician's supervision is during the pre-school years, and particularly during the very first year of the individual's life.

It is extremely important to provide proper nutrition during that first year, more important than saving a few pennies.

Physicians agree that breast milk from the normal mother is the ideal food for the human infant. For infants deprived of breast milk, it is only logical to prescribe a food which resembles breast milk as closely as possible.

S.M.A., when diluted according to directions, resembles breast milk not only in percentages of carbohydrate, protein, fat and total salts (ash) content, but also in the chemical and physical constants of the fat, in the kind of carbohydrate present, and in the correlation of the constituents. From the beginning S.M.A. has contained enough vitamin D to prevent rickets and spasmophilia. The liberal provision of vitamin A is uniform and constant in S.M.A. throughout the year, whereas this factor is variable in cows' milk, fresh or evaporated.

Samples and literature are freely available to physicians upon request.

S. M. A. is a food for infants—derived from tuberculin tested cows' milk, the fat of which is replaced by animal and vegetable fats and fortified biologically tested cod liver oil with the addition of milk sugar and potassium chloride; also other forming an unfavorable food. When diluted according to directions, it is essentially similar to human milk in percentages of protein, fat, carbohydrates and ash, in chemical constants of the fat and in physical properties.

S.M.A. CORPORATION - - CLEVELAND, OHIO