Staff Meeting Bulletin Hospitals of the » » » University of Minnesota

Clinical Pathological Conference

Volume XI Friday, October 6, 1939 Number 2

STAFF MEETING BULLETIN
HOSPITALS OF THE . . .
UNIVERSITY OF MINNESOTA

Volume XI | Friday, October 6, 1939 | Number 2

INDEX

Published for the General Staff Meeting each week during the school year, October to May, inclusive.

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William A. O'Brien, M.D.

I. LAST WEEK

Date: September 29, 1939

Place: Recreation Room,
Powell Hall

Time: 12:15 to 12:55

Program: Movie: "New Roadways"
"They Live Again"

Program 1939-1940
William A. O'Brien

Present: 114

Gertrude Gunn
Record Librarian

- - -

II. MOVIE

Title: "Donald's Golf Game"

A Walt Disney Short

Released by: R-K-O

- - -

III. ANNIVERSARY PROGRAMS

MEDICINE

General Clinics - October 9, 10, 11
(See program)

Some Trends in Medical Progress
with Particular Reference to
Chemistry in Medicine

Thursday, October 12

Morning Program
Music Auditorium, 9:00-11:30
Convocation - Dr. Parran
Northrop Memorial Auditorium,
11:30 - 12:20
Round Table Luncheons
12:30 - 2:30 - 65¢
Dr. Parran - Center for
Continuation Study
Dr. Peters - Ballroom, Union
Dr. Best - 206 Union
Dr. Whipple - 201 Union

Afternoon program - 2:30 - 5:00
Northrop Memorial Auditorium
Evening Meeting - Northrop Memorial
Auditorium, 8:00 p.m.
(Public invited)

Friday, October 13

Morning program
Northrop Memorial Auditorium,
9:00 - 12:00

Round Table Luncheons -
12:00 - 2:00 - 65¢
Dr. Carlson - Ballroom, Union
Dr. Cannon - Center for
Continuation Study
Dr. Long - 201 Union
Dr. Heidelberger - 206 Union
Drs. Bronk and Gasser - 208 Union

Afternoon program
Music Building, 2:00 - 5:00

Banquet - Minnesota Union, 6:30 p.m.
$1.00
(Wives and ladies invited)

Saturday, October 14

Anniversary Clinics -
Eustis Amphitheatre, 9:00 - 12:00

University of Minnesota Medical
Alumni Luncheon,
Hospital Dining Room, 12:30

Football Game - Purdue vs. Minnesota
2:00 p.m.

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DENTAL ANNIVERSARY (50th) October 19-20.

Program to be held in Dental Section
of Medical Sciences Building,
starting at noon on the first day.

- - -

NURSING SCHOOL ANNIVERSARY (30th)

Continuation Course in Nursing
Education - October 16 - 21

Capping Ceremony - Powell Hall, Tuesday, October 17, 8:00 p.m. Admission by ticket only.

Richard Olding Beard Lectureship Address

By Isabel Stewart, Columbia University.

Title: Florence Nightingale

Wednesday, October 18, 8:15 p.m., Music Building.

University of Minnesota Alumnae Dinner

Thursday, October 19, 7:30 p.m., Women's Club. Tickets $1.65

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IV. CASE REPORTS

1. CARCINOMA OF RECTUM: CHRONIC ULCERATIVE COLITIS.

Carroll Bellis and Lawrence Berman.

The case is that of a white male who died at the age of 26 who was first seen at the University Hospitals, October 11, 1929 at the age of 16. At that time the patient complained of pain before, during and after bowel movements since February 1929. He also complained of pain in the lower side of his chest. The patient stated that at first he had 4 to 5 bloody bowel movements a day. He had soreness in both flanks, particularly on the left side. At the time of admission to the hospital the diarrhea had subsided. The history prior to February, 1929 was essentially negative.

Physical examination on admission revealed a very well nourished child, weighing about 200 pounds. He appeared to be that type of development which is found with pituitary disturbances. Examination of the head, neck and chest was negative. The abdomen revealed some tenderness on deep pressure in the left lower quadrant. The blood pressure was normal. Proctoscopic examination revealed hyperemic mucosa in the rectum with many bleeding spots and small yellowish patches scattered over the surface of the mucosa. Examination otherwise was essentially negative.

The hemoglobin was 85%, red blood count 4,350,000, white count 22,750. Examination of the stool revealed occult blood, very many red blood cells and pus cells. No parasites were found in the stool. Urinalysis was normal but subsequently traces of albumin were found in the urine on many occasions. The hemoglobin later dropped to as low as 52%.

X-ray examination of the skull revealed no abnormalities in the sella turcica. X-ray examination of the sinuses showed left maxillary sinusitis. X-ray of the chest was negative. Examination of the colon revealed chronic ulcerative colitis of very marked degree.

During the patient's stay in the hospital the left maxillary sinus was irrigated and the patient was given numerous types of therapy including a bland, low residual diet, tincture of opium, Lugol's solution, bismuth carbonate, thyroid extract, colonic flushes with sodium bicarbonate, 5% tannic acid, charcoal, calcium lactate, serum, ultra violet therapy and tincture of belladonna All of this therapy was of very little avail and finally an ileostomy was done to shunt the content of the bowel away from the colon. After this procedure the patient's condition improved very markedly. He was discharged October 25, 1930 i good condition.

The patient was again admitted to the University Hospitals January 5, 1931 and discharged January 13, 1931. The patient had continued to have blood, pus and mucus in the discharge from the rectum. On physical examination there was found dulness at the base of the right lung posteriorly. There was a kyphosis of the lumbar spine and definite tenderness to Murphy percussion. It was not possible to determine whether his tenderness

was on the right or left side and the pain could not be localized over any definite vertebral segment.

Examination of the urine was negative. The hemoglobin was 84%, leukocytes 11,000 with a normal differential. The blood urea nitrogen was 19.6 mg.%. The material from the rectum contained blood and pus. The blood serum calcium was 11.1 mg.%.

X-ray examination of the lower thoracic and lumbar spine showed some evidence of a vertebral osteochondritis or epiphysitis. There was also diffuse bone atrophy and a condition suggesting left sacroiliac chronic arthritis. X-ray examination of the chest revealed thickened pleura and adhesions on the right. The patient was discharged with instructions to rest in bed, apply heat to the back.

The patient was again admitted to the University Hospitals August 11, 1931 and was discharged February 19, 1932. Since the previous admission on January, 1931 the patient had been fairly well at home until July, 1931 when he began to become weaker and was soon confined to bed. He had lost about 20 pounds since his previous admission and together with his previous losses this resulted in a weight of 95 pounds since February, 1932. The patient was still passing bloody mucus and liquid stools from the ileostomy.

Laboratory examination on this admission showed the urine to contain a trace of albumin, numerous casts, numerous white blood cells, occasional red blood cells. The hemoglobin was 66%, red count 3,390,000, white blood cells 16,950 with a normal differential count. The hemoglobin dropped to 38%, red cell count to 2,900,000 but as the patient improved during his hospital stay the hemoglobin rose again to 80% and the red blood cells 4,300,000. Stool examination continued to show blood, pus and mucus. Phenolsulphonphthalein test on two occasions showed 20% excreted in the first hour, 10% in the second hour and 7.5% in the first hour and 10% in the second hour. Tuberculin tests were negative. Blood non-protein nitrogen was 26.2 mg.%, creatinine 1.4 mg.%.

Treatment at this time consisted of approximately the same measures as on previous admission. Shortly after this admission the patient's weight dropped to 77 pounds and a few days before his discharge it was up to 100 pounds.

The next admission was December 21, 1938. It was learned that since 1931 the patient had gradually regained in weight and strength and in June, 1938 the patient weighed 180 pounds. During the previous six years the patient had had a bloody discharge from the rectum occasionally, but this discharge had been becoming much worse during the two months prior to December, 1938. The patient also was losing weight and strength. He had also developed frequency, nocturia and dysuria. On admission the patient was complaining of severe backache, chiefly in the region of the left sacroiliac area.

Laboratory examination showed a residual urine of 5 cc. and containing 1-3+ albumin. The hemoglobin was 75%, leukocytes 17,800, 84% neutrophils, 10% lymphocytes. The Wassermann was negative. The blood urea nitrogen was 10.1 mg.%, blood sugar 107 mg.%. Examination of the stool disclosed them to be dark green and mucoid. The mucus from the rectum contained blood and pus. The urine on culture contained hemolytic streptococcus and staphylococcus.

Physical examination disclosed an ileostomy and a rather large fixed mass, probably inflammatory in origin in the midline just above the symphysis pubis. Intravenous pyelogram, which had been made previously had demonstrated a right hydronephrosis and a non-functioning left kidney. On 1-23-39 the patient was cystoscoped. The catherterized urine was found to contain pus grade I. The prostate was normal. The trigone and base of the bladder were covered with exudate and bled freely on slight manipulation. The right ureteral orifice was normal. The left could not be located. A catheter encountered no obstruction on the right. No attempt was made to catheterize the left ureter. The urine specimen obtained

from the right kidney pelvis contained an occasional pus cell. The diagnosis was compression of both lower ureters by inflammatory mass in the abdomen, secondary to the ulcerative colitis with functionless left kidney and markedly hydronephrotic right kidney.

On Jaunary 26, 1939 the abdomen was explored. The peritoneum was found to be extremely thick, no abscesses were found. It was thought that the previously mentioned mass was a collection of several loops of bowel which were found to be tightly adherent to one another. Sections of the markedly thickened peritoneum revealed only chronic inflammation.

On February 6, 1939 the patient was recystoscoped. The right ureter was again easily catheterized but it was impossible to pass the catheter to the left kidney due to an obstruction about 5 cm. above the left ureteral meatus. Indigo carmine returned at reduced concentration from the right kidney and no indigo carmine returned on the left side.

On February 20, 1939 the left kidney region was explored through a left lumbar incision. Upon incision of what would normally be perirenal fat no kidney was found. A piece of tissue which was thought to be an aplastic left kidney was removed and the pathologic report indicated that it might represent renal tissue but no glomeruli or characteristic renal structure could be found in the tissue. The patient's postoperative course was complicated by a slight wound infection together with abdominal distention, nausea and vomiting. The latter complaint was quickly relieved with nasal suction and the patient was discharged on March 15, 1939.

The patient was readmitted for the 6th time on April 3, 1939 for incision and drainage of an abscess occurring in the previous laparotomy scar. The patient was readmitted for the 7th and last time 6-18-39, particularly because of vomiting and an inability to excrete through the ileostomy. There was no abdominal pain but the abdomen had become distended. On examination the patient was found to be very ill and dehydrated. The abdomen was moderately distended but there was no muscle spasm or pain. The abdominal abscess opening was found to have a tract of 3 cm. The ileostomy opening was stenotic and rectal examination was not possible because of stricture of the rectal canal.

A flat plate of the abdomen showed the presence of small bowel distention. However, the patient soon improved and the ileostomy began to function again. The patient's temperature was elevated on this admission. Right ureteral catheterization was performed following which the temperature became lower. The ureteral catheter was removed on July 7, 1939. The patient developed marked jaundice and although supportive measures were continuously instituted in the form of sulphanilamide and transfusions the patient gradually became worse and lapsed into a period of unconsciousness which ended in his death on July 15, 1939.

Autopsy

The body is that of a very severely jaundiced, emaciated white male, 182 cm. in length, weighing about 100 pounds. A double barreled ileostomy is present in the right lower quadrant. There is a 4 cm. suprapubic drainage wound in the abdomen. This is open and there is a small amount of necrotic material at its base. There is a healed, left nephrectomy incision.

The Peritoneal Cavity contains several liters of yellowish cloudy fluid. There are very dense adhesions in the region of the ileostomy. The bowel is adherent to the parietal peritoneum on the anterior abdominal wall just over the symphysis pubis. The bowel is anterior to the fundus of the bladder in this region. There is a hard, fibrous mass attached to the peritoneum and several loops of ileum in the right lower quadrant. The small intestine is very markedly distended with gas, particularly proximal to the ileostomy.

The Right Pleural Cavity is obliterated by recent pleural adhesions. There is no fluid in either pleural cavity.

The Heart weighs 300 grams. There is no hypertrophy or dilation of any of the chambers. There are no lesions or deformities of any of the valves. The coronary arteries are free of change. There is no evidence of hemorrhage, necrosis, or fibrosis of the myocardium. The myocardium is cloudy.

The Left Lung weighs 230 grams. It is entirely normal except for slight marginal congestion and atelectasis posteriorly. The Right Lung weighs 270 grams. There are intralobar adhesions. A Ghon tubercle is found on the medial and lower aspect of the right lower lobe.

The Spleen weighs 220 grams. It is firm, light purple in color.

The Liver weighs 2600 grams. There are numerous spherical masses composed of white, hard tissue. They are from about 6 mm. to 10 cm. in diameter. The total number is approximately one dozen. There is no compression by any mass upon the cystic, hepatic or common bile ducts. Bile passes freely into the duodenum.

There are no lesions of the esophagus or stomach. In the region of the ileostomy there are dense adhesions. The distal loops of the ileum and the entire colon are collapsed.

There is no evidence of hemorrhage, necrosis or tumor in the Pancreas or Adrenals.

The Left Kidney is absent but the Right Kidney weighs 250 grams. There is a very marked hydronephrosis with numerous cortical abscesses, also old scars. The ureter is thick walled and it is obstructed in its distal end. It is incorporated into a large tumor mass in the right lower quadrant. The bladder is a small contracted vesicle which contains approximately 20 cc. of purulent material. The mucosal membrane of the bladder is hemorrhagic. The left ureter is absent. The prostate and rectum are incorporated into one solid mass filling the entire pelvis with extension of this mass apparently into the sacrum. The mass arises from a segment of the rectum about 10 cm. in length beginning 4 cm. from the anus. The lumen of the rectum is markedly narrowed. At one point the lumen is entirely obliterated. The mucous membrane cannot be recognized as such. The prostate is not identified as it forms the part of the mass of carcinomatous tissue which completely encircles the rectum.

There is no lymphadenopathy.

The head is not examined.

Mocroscopic

Colon - there is marked atrophy of the entire colon. There is absence of mucosa and partial to complete obliteration of the lumen by fibrous tissue.

Right kidney - severe pyelonephritis.

Liver - metastatic adenocarcinoma.

Rectum and Prostate - adenocarcinoma, primary in the rectum.

Diagnoses

1. Chronic ulcerative colitis.
2. Ileostomy.
3. Carcinoma of rectum with infiltration into prostate and sacrum and with metastasis to the liver.
4. Agenesis of left kidney.
5. Atrophy of colon.
6. Hydronephrosis and pyelonephritis, right.
7. Emaciation.

Summary

This case is of interest because of a ten year survival following ileostomy for ulcerative colitis. Furthermore it illustrates how complete healing and obliteration of the lumen of the remaining colon may occur. It also illustrates importance of considering the possibility of carcinoma of the rectum in young persons. The immediate cause of death, pyelonephritis, was secondary to an obstruction of the ureter by a carcinomatous mass.

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2. TRANSITIONAL CELL CARCINOMA OF THE BLADDER

Thomas J. Kenyon and
William W. Moir

The case is that of a white male, whose complaints on admission were bloody urine and pain in the upper part of the abdomen. His history revealed that he had first noticed blood in his urine about one year ago. At this time he also began to have nocturia. Since the onset of his trouble the hematuria and nocturia had been intermittent in character. Medicine given him by his local physician apparently relieved his symptoms. During the last three weeks before admission to the hospital his hematuria became constant in nature and he suffered from dyrusia and nocturia. He also had crampy lower abdominal pain associated with diarrhea and anorexia. Past history reveals he has had an elevated blood pressure for about 2 years.

Physical examination revealed the patient to be a fairly obese individual in coma with heavy Kussmul breathing. The pupils did not react to light. Examination of the mass revealed that the tongue was heavily coated. No acetone was noted on breath. Examination of the lungs revealed numerous inspiratory and expiratory rales of a musical nature. The heart tones were obscured by the breath sounds. The heart rate was 110. The blood pressure was 168/98. Fulness and dulness were noted in both flanks, suggesting ascites. There was also tenderness in both flanks. There appeared to be small amount of edema of the scrotum and lower extremities. Examination of the skin revealed small red macules and pustules unevenly distributed over the arms and trunk. Rectal examination revealed moderate enlargement of the prostate. The clinical impression was bilateral renal calculi or bladder tumor involving both ureteral orifices.

Laboratory: The urinalysis revealed gross blood. Analysis of the urine revealed a hemoglobin content of 50%, red blood cells 2,460,000, white cells 7,000. On admission to the hospital his hemoglobin was 68%, erythrocytes, 3,600,000, white blood count being 13,000 with 96% neutrophils, 4% lymphocytes. Non-protein nitrogen on admission was 190, urea nitrogen 135, creatinine 24, blood sugar 289, carbon dioxide combining power 17%. On September 12, the blood urea nitrogen rose to 169, the carbon dioxide combining power 24$, the blood chlorides 608. The Wassermann was negative. Electrocardiogram revealed the presence of myocardial damage compatible with coronary disease.

X-rays: abdomen was unsatisfactory. There was thought to be some consolidation of the left lung base. The heart appeared to be somewhat enlarged in the region of the left ventricle.

Course: On admission to the hospital the patient's temperature was 99°. The following day it rose to 101.6°. On the day of death his temperature was 99.4°. The patient was treated for relief of his uremia as well as other supportive measures, and he expired 2 days after admission.

Autopsy

The body is that of a well developed, well nourished male, the estimated weight 200 pounds, length 180 cm. There is no rigor. There is moderate dorsal hypostasis. There is no edema, cyanosis or jaundice. The pupils are equal and regular and about 3 mm. in diameter. There is evidence of subcutaneous hemorrhages in both antecubital fossae.

The Peritoneal Cavity contains only a slight excess of fluid. The appendix appears normal. The liver is at the costal margin on the right and about 6 cm. below the xiphoid in the midline. The diaphragm is at the fourth interspace on the right and at the fifth interspace on the left.

The Left Pleural Cavity is obliterated by adhesions. The Right Pleural Cavity has numerous adhesions posteriorly and at the apex. There appears to be a small amount of fluid on the right side. The Pericardial Sac appears normal. There is no thrombus or embolus in the pulmonary artery.

The Heart weighs 425 grams. There appears to be only a slight hypertrophy of the left ventricle. There is a slight dilation of the right ventricle. The mural and valvular endocardium appear normal. The root of the aorta shows only a moderate amount of atherosclerosis. The coronary arteries on sectioning reveal only a slight amount of atherosclerosis.

The Left Lung weighs 725 grams. The Right Lung weighs 810 grams. There appears to be a marked edema of the upper and lower lobes of the right lung. The middle lobe appears normal. Examination of the bronchi of the right lung reveals nothing of note. The surface of the left lung is covered by thick, fibrous adhesions. On sectioning there is noted some congestion in the lower lobe. There is also a moderate amount of edema in the upper lobe. There is small amount of bloody purulent material in the bronchi of the left lung. There are a few enlarged hilar nodes.

The Spleen weighs 100 grams. Externally it appears normal. On sectioning the trabeculae stand out quite prominently.

The Liver weighs 1340 grams. Externally no abnormalities are noted. On sectioning there is no evidence of any metastases. The liver parenchyma appears entirely normal. The gallbladder contains about 50 cc. of greenish, thick, tenacious bile which is easily expressed into the duodenum. There are several stones present, the largest being about 2 cm. in diameter.

The esophagus, stomach and small bowel appear normal. In the ascending transverse and upper portion of the descending colon the mucosa has a dark brown appearance, suggestive of a melanosis coli.

No abnormalities are noted in the Pancreas or Adrenals.

The Right Kidney weighs 200 grams. the Left Kidney 250 grams. The capsule of both kidneys strip with ease from smooth surfaces. There are no gross abnormalities in the parenchyma of either kidney. The pelves of both kidneys are dilated. This dilatation appears a little more marked on the left. There appears to be a slight injection of each kidney pelvis. The left ureter is dilated to 2 cm. in diameter. The right ureter approximates that of the left in diameter.

The bladder mucosa appears a little edematous. There is a hard carcinomatous mass located at the trigone of the bladder. The mass is 5 cm. in its transverse diameter, and about 3 cm. in its anterior posterior diameter. It has a broad base and the surface has a hard ulcerative appearance. The mass, encroaches upon the ureteral orifices and extends up the wall of the left ureter a distance of about 5 cm. nearly constricting its lumen. There is another mass on the left and posterior wall of the bladder which is 3 x 2 cm. in diameter. This also attached by a broad base and represents a mucosal metastases. Adjacent to this is a small polyp about 1 cm. in diameter. The prostate shows only a slight hypertrophy.

The genital organs reveal nothing of note.

The Aorta shows only a slight amount of atherosclerosis.

The thyroid presents no abnormalities.

There are a few enlarged pelvic nodes. There were no other enlarged lymphnodes noted.

Microscopic

Bladder - transitional cell carcinoma.

Left ureter - there is noted a carcinomatous metastases in the lymphatics and extending into the wall of the ureter.

Lungs - edema and bronchopneumonia.

Kidneys - arteriolosclerosis.

Diagnoses

1. Transitional cell carcinoma of the bladder with metastases to regional nodes and left ureter.

2. Bronchopneumonia and edema of the lungs.
3. Cholelithiasis.
4. Bilateral hydronephrosis.
5. Renal arteriolosclerosis.
6. Left pleural adhesions.

Summary

This case of carcinoma of the bladder emphasizes the importance of hematuria as observed in elderly people, and indicates how this neoplasm is slow to metastasize. The symptoms were of one year duration and yet the spread of the tumor was only by local extension.. This would suggest that cystectomy would be theoretically an effective surgical procedure if the ureters could be transplanted without resulting in the usual fatal terminal pyelonephritis.

V. PROGRAM - UNIVERSITY OF MINNESOTA CLINICS

University of Minnesota Clinics
October 9 - 11, 1939
Center for Continuation Study

Monday, October 9

8:30 - 9:00 Orientation - Mr. Nolte, Dr. O'Brien
9:00 - 10:00 Ophthalmic Problems of General Practice - John S. Macnie
10:00 - 11:00 Diagnosis and Management of Sinusitis - Frank L. Bryant
11:00 - 12:00 The Endocrine Glands and Hypertrophy of the Prostate - Charles D. Creevy
2:00 - 5:10 University of Minnesota Hospitals Clinics - M 515
2:00 - 2:40 Surgery - James M. Hayes
2:50 - 3:30 Pediatrics - Fred C. Rodda
3:40 - 4:20 Medicine - Thomas Lowry
4:30 - 5:10 Neuropsychiatry - J. Charnley McKinley
8:00 - 9:00 Lower Back Pain - Edward T. Evans

Tuesday, October 10

8:50 - 12:00 Ancker Hospital Clinics - Clinic Room
8:50 - 9:30 Dermatology - John F. Madden
9:40 - 10:20 Urology - Frederic E. B. Foley, Philip F. Donohue
10:30 - 11:10 Medicine - Harry Oerting
11:20 - 12:00 Surgery - Alexander R. Colvin
2:00 - 3:00 Relationship of Dermatology to Internal Medicine - Henry E. Michelson
3:00 - 4:00 Roentgenologic Aspects of Diseases of the Chest - Leo G. Rigler
4:00 Tea
4:30 - 6:00 Clinical Features and Treatment of Rheumatic Infection in Childhood - Arild E. Hansen - Todd Amphitheatre
8:00 - 9:00 Control of Tuberculosis in the Community - J. Arthur Myers

Wednesday, October 11

8:50 - 12:00 Minneapolis General Hospital Clinics - Clinic Room
8:50 - 9:30 Surgery - Arthur A. Zierold
9:40 - 10:20 Pediatrics - E. J. Huenekens
10:30 - 11:10 Medicine - F. H. K. Schaaf
11:20 - 12:00 Obstetrics and Gynecology - Jalmar H. Simons and Leonard A. Lang
2:00 - 3:00 Cerebral Complications of Hypoglycemia - J. Charnley McKinley
3:00 - 4:00 Surgical Relief of Pain - William T. Peyton
4:00 Tea
4:30 - 6:00 Factors in Treatment of Gynecological Malignant Tumors - John L. McKelvey

Note: Unless otherwise specified, all meetings will be held at the Center for Continuation Study.