1493

TUMOR TISSUE REGISTRY

LOS ANGELES COUNTY HOSPITAL

****

PROTOCOL

FOR

MONTHLY SLIDES

OCTOBER 1964

LESIONS OF THE SPLEEN

NAME: D. E. W

OCTOBER 1964 - CASE NO. 1

AGE: 23 SEX: Female RACE: Caucasian

ACCESSION NO. 13482

CONTRIBUTOR: S. M. Rabson, M. D.
Mission Hospital
Huntington Park, California

Outside No. 64-6753

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

In May 1963, the patient gave a history of a lump in the right side of the neck which had been present for one month. The mass, located at the upper end of the sternocleidomastoid muscle, 4 - 5 cm. in diameter, was biopsied, followed by x-irradiation.

In February 1964, the patient was again seen with fever (100-104 F) for 10 days and a non-productive cough. Examination revealed abdominal tenderness. There was marked anemia (hemoglobin 6.8 gm.) for which patient was transfused. Jaundice was present after several days (bilirubin elevated). Nitrogen mustard, 10 mg., was administered on February 15, 1964. The patient expired on February 17, 1964.

AUTOPSY:

The spleen was greatly enlarged (estimated weight, 500 gms.), softened and reddened. On section, it was distinctly pulpy and marked by numerous enlarged follicles.

There was a slight increase of jaundiced clear peritoneal fluid. The liver was greatly enlarged, softened and friable with many areas of fresh hemorrhage. Enlarged lymph nodes in the retroperitoneum were encountered.

NAME: L. B. OCTOBER 1964 - CASE NO. 2

AGE: 45 SEX: Female RACE: Caucasian ACCESSION NO. 13427

CONTRIBUTOR: E. R. Jennings, M. D. Outside No. S 1919-63
Memorial Hospital of Long Beach
Long Beach, California

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

History: The patient was a 45 year old lady who had an extremely large spleen that was causing her abdominal discomfort. She was known to have polycythemia rubra vera for at least 10 years which had been controlled by blood-letting in the past. During the past 6 months, she had had anemia with an iron deficiency type picture, and was shown after pertinent studies to have upper gastrointestinal hemorrhage. Gastroscopy showed peculiar mulberry-like lesions that probably were producing the bleeding.

Laboratory report: Admitting hemoglobin, 11.3 gm., hematocrit 40, WBC 16,200 with 83% polys, 1 metamyelocyte and 2 myelocytes. RBC 6,140,000. Urine: 3/ albumin with many trichomonads; 20-23 pus cells per/hpf. The serologic test was non-reactive. The platelet count was reported as 1,412,000 and subsequent examinations revealed these to be closer to the 2,000,000 range. On April 9, 1963, the platelet count had risen to 3,080,000. Subsequent determinations were also in the three to three and one-half million range, but these were all post-surgical.

SURGERY:

The spleen was removed on April 1, 1963. A splenoportogram was done before surgery, after the patient was anesthetized, showed a thrombosed splenic vein with extensive varices between the spleen and the stomach leading into a fairly normal portal system. A second angiogram of the portal system, done after splenectomy, showed a relatively normal picture. The spleen itself was large, being estimated preoperatively to be 1500 grams. It was densely adherent to contiguous structures making dissection extremely difficult. It was noted to be densely adherent to the left lobe of the liver. There were extensive varices between the spleen and the stomach. The gallbladder was slightly thickened and contained a few calculi. The spleen was removed along with the gallbladder and appendix.

GROSS PATHOLOGY:

The specimen consisted of an appendix, gallbladder and spleen. The spleen weighed 1285 gm. and measured 24 x 15 x 9 cm. The capsule was intact and showed irregular areas of hyaline thickening on one surface. The spleen itself showed a lobulated appearance and was generally smooth and glistening. The color was purple brown. The cut section showed a meaty reddish brown appearance with some areas suggestive of petechiae. Multiple serial sections were taken at approximately 1 cm. intervals revealing hemorrhagic areas.

FOLLOW-UP:

The patient has been in the hospital on two occasions since her hospitalization for splenectomy. Both occasions were for recurrent pleural effusion of unknown etiology. During her admission on January 22, 1964, her hemoglobin was 12.6, hematocrit 45, RBC 6,000,000, WBC 49,000, PMN's 88, filaments 87, lymphocytes 8, monocytes 3, eosinophils 1, platelet count 1,682,000. Leukocyte alkaline phosphatase was 260. On March 21, 1964, she was again admitted and at that time the WBC was 84,200 with a differential similar to the previous admission except for the presence of some immature cells of the granulocytic series. Platelet count was 1,715,000. Bone marrow studies revealed hypercellular marrow with increase in all elements but most prominent in the granulocytic and megakaryocytic series. Myleran therapy was started at this time, and according to her physician, the white cell count has dropped to approximately 15,000; however, the high platelet count apparently persisted. She is however, relatively asymptomatic.

NAME: C. K.

OCTOBER 1964 - CASE NO. 3

AGE: 40 SEX: Male RACE: Caucasian

ACCESSION NO. 13226

CONTRIBUTOR: Sorrell N. Glover, M. D.
Mount Sinai Hospital
Los Angeles, California

Outside No. T 3795-63
T-3803-63

TISSUE FROM: Spleen and liver

CLINICAL ABSTRACT:

History: The patient was a 40 year old accountant with polycythemia vera of 8 years' duration, with recent onset of diagnosed myelofibrosis. His symptoms began in approximately 1952 and he had upper gastrointestinal symptoms diagnosed as duodenal ulcer, which did not respond to antacids in 1953. At that time, he was noted to have polycythemia and was discovered to have an enlarged spleen. He received his first dose of P-32 in 1953 and had subsequent phlebotomies. His highest recorded hematocrit was 70 in 1955, and his white cell count varied from 11,000 to 22,000. From 1959 to 1960, the patient was closely followed and had two subsequent doses of P-32 and multiple phlebotomies. In early 1962, bone marrow studies revealed the presence of myelofibrosis. Myleran was also administered to patient in 1962 with subsequent thrombocytopenia to as low as 22,000. Patient was initially admitted to the hospital in February 1963. He had a hematocrit of 47, hemoglobin of 13 gms.% and an uncorrected white cell count of 75,000. When this was corrected to the presence of the nucleated red cells, in the patient's peripheral blood, the white cell count was 43,500. The differential demonstrated 24 segmented cells, 18 bands, 7 metamyelocytes, 4 myelocytes, 12 lymphs, 9 monocytes, 15 eosinophiles, 8 basophils and 2 blasts. Numerous nucleated red cells were also present. Combined ferrokenetic and erythrocyte survival studies indicated extramedullary hematopoiesis, principally of hepatic nature, although splenic radioactivity was also elevated. Sacral activity, however, showed no significant rise following injection of tracer doses. There was also mild impairment of red cell iron utilization and a decrease in the apparent half-time of erythrocyte survival. Repeat bone marrow studies confirmed the diagnosis of myelofibrosis. Platelet counts varied from 52,000 to 90,000, reticulocytes were 2.8 to 5.2%. Leukocyte alkaline phosphatase was markedly increased. Uric acid was elevated to 9 mgm.%. Incidentally, the patient had developed gouty arthritis over the preceding 2 years. Because of progressive weight loss, anorexia, gastrointestinal symptoms and severe abdominal pressure symptoms because of the mechanical pressures exerted by the greatly enlarged spleen, splenectomy was recommended.

SURGERY:

On September 11, 1963, splenectomy and biopsy of liver were performed.

GROSS PATHOLOGY:

The spleen weighed 3080 gm. and measured 26 x 16 x 15 cm. The capsule generally was smooth, but showed multiple large, stellate depressions with thickened scarring in the areas of the splenic capsule. Numerous large vessels were present in the hilus as well as multiple swollen lymph nodes, and an accessory spleen, 1.5 cm. in diameter. On section, the spleen had a homogeneous, deep, reddish-purple, relatively dry appearance, which felt extremely firm and fibrous. The gross scars were present only over the capsule in the areas of the stellate depressions. Sections of the accessory spleen and the small lymph nodes had a similar cross-section to the spleen.

The specimen consisted of a wedge-shaped segment of tissue, measuring 2.5 cm. in length by 0.5 cm. in width and 1 cm. in depth. The capsular surface was smooth and shiny. The parenchyma revealed a slight nutmeg appearance and was firm in character. On cut section there appeared to be an increase in yellowishness to the parenchymal tissue.

COURSE:

The evening of the surgical procedure, the patient was awake and alert and seemed to have withstood the procedure well. However, early the following morning, he died suddenly. No autopsy was obtained.

NAME: J. D. OCTOBER 1964 - CASE NO. 4

AGE: 55/ SEX: Male RACE: Caucasian ACCESSION NO. 12821

CONTRIBUTOR: Dorothy Tatter, M. D. Outside No. 67992
Los Angeles County Hospital
Los Angeles, California

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

History: This elderly Caucasian male had previously been hospitalized with a diagnosis of chronic brain syndrome and placed in a closed board and care home. He was re-admitted to this hospital on September 14, 1961, comatose, and with the only history being that from the nursing home stating that the patient had apparently become comatose over a period of one week prior to hospitalization.

Physical examination: On admission, the patient was found to be comatose with Cheyne-Stokes respirations and marked dehydration. Blood pressure 102/70; pulse 104 and faint but regular.

COURSE:

The patient expired on September 23, 1961.

GROSS PATHOLOGY: (Autopsy)

The spleen weighed 160 grams. On cut section it was soft, the surface was gray and wrinkled, and the normal structures throughout were reddish-purple throughout. The lymph nodes throughout the body were unremarkable.

Autopsy disclosed a perforated duodenal ulcer with generalized peritonitis; also noted was polycystic disease of the kidney, liver and pancreas.

NAME: R. C. OCTOBER 1964 - CASE NO. 5

AGE: 69 SEX: Female RACE: Caucasian ACCESSION NO. 12570

CONTRIBUTOR: Leo Kaplan, M. D.
Mt. Sinai Hospital
Los Angeles, California

Outside No. T 2848-62

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

History: This 69 year old white female was admitted to the hospital on September 19, 1962 with a diagnosis of severe anemia. For 3 months she had been complaining of weakness and malaise, that was progressive, a fever that fluctuated between 99 to 104 in an irregular fashion. There was a history of achlorhydria for many years. She had received Vitamin B-12 and Acidulin without response of the progressive and persistent anemia. Oral iron was ineffective. A hematologic work-up showed that only the hemoglobin was low and all other blood elements were normal. The illness was also associated with a disturbing pruritis for which she had taken antihistaminics. She was known to have angina for 2 years, for which she received Peritrate, 80 mgm. b.i.d. This was associated with some exertional dyspnea. There was a family history of severe anemia in a daughter. In 1945 she had a glaucoma surgery. She complained of belching, epigastric discomfort without vomiting or melena without other symptoms, considered to be secondary to her achlorhydria.

Physical examination: Temperature 101; pulse 72; blood pressure 136/80. She was moderately obese. There was some small axillary and epitrochlea lymph nodes palpable, along with some lymph nodes in the left cervical area. The sclerae appeared slightly icteric. There was pallor of her mucous membrane. The tongue appeared normal. The lungs and heart were normal. The liver was smooth, slightly tender and sharp-edged, and extended 1 finger-breadth below the costal margin. The spleen was firm and extended 2 fingerbreadths below the costal margin. A pelvic examination showed a stenotic os and a 3 x 3 cm. hard mass was felt suprapubically.

Laboratory studies showed the admission urine to be 1.011 specific gravity, no protein or glucose, 1 RBC, 3 WBC and 0 casts per/hpf. The blood count showed 8.8 gm. of hemoglobin, 28% hematocrit with 3.48 million RBC. per/cu. mm. with the HCV 81, MCH 26, MCHC 32, and 2% reticulocytes. The platelets were 425,000 per cu. mm. and the WBC were 11,250 with 83% segmented neutrophils, 12% lymphocytes, 4% monocytes and 1% eosinophils. The bleeding time was 3 minutes and clotting time 15 minutes. The serologic test for syphilis was negative. A blood creatinine was 0.78 and alkaline phosphatase 2.0. The prothrombin was 66%, SGOT was 50 and uric acid 6.4 mgm.%. The bilirubin showed 0.36 mgm.%, total with 0.13 mgm.% indirect. The iron binding capacity was 196 microgram percent and the serum iron was less than 20 microgram percent. The bone marrow was essentially normal except for a

clump of plasmacytes. Skin tests for histoplasmosis, coccidioidomycosis and tuberculosis were negative. The blood proteins showed 7.59 gm.%, total with 3.36 gm. of albumin and 4.23 gm. of globulin. A protein electrophoresis showed 7.70 gm.%, total with 2.82 gm. of albumin, 0.84 alpha 1, 1.28 alpha 2, 0.86 beta and 1.90 gm. of gamma globulin. A stool was positive for occult blood, 4+.

X-ray studies showed normal lung and cardiovascular shadows. There was slight hypertrophic arthritis of the thoracic and lumbar vertebrae. An IVP showed an enlarged spleen, normal-sized liver and a soft tissue density in the pelvis, etiology unknown. The kidneys were normal. A skull x-ray showed calcification of carotid artery and choroid plexus with moderate osteoporosis.

SURGERY:

On September 28, 1962, a laparotomy was performed. The spleen was removed and the liver biopsied.

GROSS PATHOLOGY:

The spleen measured 19 x 11 x 8.5 cm. In its lower pole it was irregularly enlarged, firm, and through the capsule could be seen yellow gray nodularities. On section, the lower pole of the spleen contained a demarcated, firm, grayish delicately tan mass that measured 8 x 8 cm. in diameter and showed some peripheral scalloping and compression of the adjacent deep reddish brown splenic pulp that contained slightly enlarged lymph follicles. The liver biopsy measured 2.3 cm. in greatest diameter and appeared normal grossly.

FOLLOW-UP:

As of 9-21-64, patient is asymptomatic and entirely well hematologically. The liver is still 2 cm. below the costal margin. She had had a 4 mg./day (6 weeks) course of Leukeran without appreciable alteration of the liver size. She is not being treated now. There is no adenopathy and all x-rays are negative.

NAME: L. B. OCTOBER 1964 - CASE NO. 6

AGE: 59 SEX: Male RACE: Caucasian ACCESSION NO. 12055

CONTRIBUTOR: Howard A. Ball, M. D. Outside No. 61-A-61
Grossmont Hospital
La Mesa, California

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

History: This 59 year male died following a spontaneous intracranial hemorrhage which developed after pounding his head with his hand in the shower.

GROSS PATHOLOGY: (Incidental autopsy finding)

The spleen was about double normal size and was estimated to approach 500 gm. and exhibited throughout its substance and beneath the capsule a significant number of purplish nodular areas, some of which on transection appeared to be spongy in consistency and to suggest angiomas, whereas others exhibited a mottled yellowish appearance suggesting a type of chronic granuloma. These nodules varied from ½ to 1½ cm. in diameter, and were extensively distributed through the splenic pulp.

The liver was extremely large, weighing 2500 gm. and exhibiting a mottled, light yellowish color, and within the parenchyma there were a few scattered foci of a peculiar reddish nodular lesion, varying from a few mm. to as much as 1 cm. in maximum extent, the nature of which was not readily clear.

Because of surgical intervention and resulting disorganization of the cranial contents, it was not possible to establish a vascular abnormality in the cerebral tissues. Autopsy revealed that this man died of spontaneous subdural hematoma, apparently the result of self-inflicted trauma. The patient had had hypertension of unstated duration, and at autopsy an incidental small pheochromocytoma, left adrenal, was also found. However, the spleen and liver were the most interesting organs.

NAME: N. D. OCTOBER 1964 - CASE NO. 7

AGE: 41 SEX: Female RACE: Caucasian ACCESSION NO. 13305

CONTRIBUTOR: Irving Madoff, M. D.
Los Angeles, California Outside No. DS 1059-63

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

History: In 1956, the patient was seen by her physician because of the onset of dull epigastric pain, not associated with nausea or vomiting. She had had intermittent recurrences of pain to date with occasional palpitation and precordial discomfort. Past history revealed appendectomy and oophorectomy, dates unknown, and congenital deformity of right leg with elephantiasis for which she had multiple operations. There is a familial history (mother and sister) of diabetes.

She had recent symptoms of weakness, anorexia, fatigue, and occasional burning on urination.

Physical examination: General examination was essentially negative except for a hard, tender painful mass, somewhat movable in the left and right upper quadrants of the abdomen. There were multiple surgical scars and elephantiasis present on the right leg.

The laboratory work-up was essentially negative except for the moderately elevated blood sugar with diabetic curve and high renal threshold.

X-ray studies revealed differential diagnosis of splenomegaly and pancreatic cyst.

SURGERY:

In September 1963, a splenectomy was performed.

GROSS PATHOLOGY:

The specimen consisted of a spleen, measuring 30 x 19 x 13 cm. and weighing 1950 gm. The capsule was thickened with gray and dark mottling. The cut surface showed many cystic spaces up to 1 cm. in size, some with gelatinous contents, mainly around the periphery. There was dense fibrosis in portions of the stroma with focal calcifications and small infarcts present in a few places.

FOLLOW-UP:

Patient apparently well since surgery.

NAME: T. M. OCTOBER 1964 - CASE NO. 8

AGE: 10 SEX: Female RACE: Caucasian ACCESSION NO. 13799

CONTRIBUTOR: Frank Finck, M. D. Outside No. 64-13518
Los Angeles County Hospital
Los Angeles, California

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

History: This 10 year old Caucasian female was admitted to the hospital on August 18, 1964, complaining of intermittent left upper quadrant pain and increasing abdominal size during a six month period.

Past history was notable in that at birth she was anemic and had some hepatosplenomegaly. During early childhood she had frequent attacks of epistaxis and bruised easily. At age 4 years, she was hospitalized for a left upper quadrant tumor. She received transfusion and Vitamin B_{12} injection. Discharge diagnosis: Splenomegaly, etiology unknown. She developed in a fairly normal fashion under the care of her family physician, doing well in school except for noticeable difficulty in "keeping up with the other kids" physically.

Family history: Negative for splenectomized or anemic members.

Physical examination: The patient was an alert, intelligent female, somewhat smaller than expected by age. Positive physical findings were limited to the abdomen with the liver down 8 cm. below the costal margin and the spleen palpable into the pelvis.

Laboratory report: Hemoglobin 9.7; WBC 4800; differential - normal; reticulocyte count 2.6%; platelets 90,000; sedimentation rate 26 mm.; PCV 30%; bleeding time 4 minutes; Rumple Leed negative; clot retraction 1-2 hrs; prothrombin time 69%. Urinalysis negative. Chemistries: Electrolytes within normal limits; albumin 4.6, globulin 3.0, alkaline phosphatase 2.5; SGOT 24; acid phosphatase 11.1 units (normal 0.5 to 4.0); cholesterol 123 mg.; total lipids 610 mg.; thymol turbidity 7 units. Bone marrow: Scattered foci of cells with foamy cytoplasm and bi-lobed pyknotic nuclei. Impression: Storage disease. Serology nonreactive. EEG normal. IVU revealed slightly enlarged left kidney, otherwise normal.

SURGERY:

On September 4, 1964, a splenectomy was performed. At surgery it was noted that the spleen decreased in size approximately 50% following ligation of the splenic artery. The liver was enlarged and a granular surface was described. A biopsy was taken. The postoperative course was uneventful.

GROSS PATHOLOGY:

The specimen consisted of a 675 gm., 20.5 x 7.6 x 5.3 cm. spleen. It was covered by a tan red capsule which was smooth and glistening. There was a small focal area which appeared to be dilated vein noted over one border. Along the inferior surface, near the hilum, were two grossly adjacent puncture marks probably representing the result of splenoportography. Sectioning disclosed a red, firm, homogeneous gray cut surface which tended to bulge slightly. The trabecular pattern was easily seen but no Malpighian bodies or other demarcations were noted.

NAME: J. C. OCTOBER 1964 - CASE NO. 9

AGE: 38 SEX: Female RACE: Caucasian ACCESSION NO. 11407

CONTRIBUTOR: Donald L. Alcott, M. D. Outside No. S61-94
Santa Clara County Hospital
San Jose, California

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

History: This 38 year old white female was admitted to the hospital on January 5, 1961, with a history that shortly after a vaginal hysterectomy in February 1958, she noted a "lump in her stomach." The mass remained the same size. It was tender to the touch and she couldn't lie on her stomach.

On physical examination there was a mass, measuring 10 x 6 cm., in the left upper quadrant. This appeared to have a cystic medial component and an outer solid component. Numerous laboratory studies were not contributory.

Pneumoperitoneography, IVP, G.I. series were done and the impression was most likely a splenic cyst.

SURGERY:

On January 17, 1961, a large cystic mass, occupying the entire left upper quadrant, was found. The mass arose from the upper pole of the spleen and the lower pole appeared of normal size. The other organs appeared normal.

GROSS PATHOLOGY:

The specimen consisted of an ovoid cystic mass, measuring 16 x 15 x 12 cm. and weighing 1550 gm., with a smooth glistening deep red-brown surface. The cyst wall varied from 0.1 to 1.0 cm. in thickness. The cyst contained a turbid grayish-brown fluid and had a trabeculated whitish lining. At one pole, there was a 6 x 6 x 6 cm. area of unremarkable spleen.

FOLLOW-UP:

The patient's last visit to the hospital was on May 29, 1962, at which time she was complaining of a torticollis. The treatment was symptomatic and the patient has not been seen since.

NAME: M. E. OCTOBER 1964 -- CASE NO. 10

AGE: 70 SEX: Female RACE: Caucasian ACCESSION NO. 12285

CONTRIBUTOR: A. J. McQueeney, M. D. Outside No. A62-9
St. Francis Hospital
Santa Barbara, California

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

In August 1959, the patient noted a firm, nontender mass, 2.0 cm. in diameter, in the right breast. A radical mastectomy was performed on August 9, 1960 at Pittsburgh, Pennsylvania, and diagnosed as "duct carcinoma of right breast with negative axillary lymph nodes." However, the breast slides were reviewed by the contributor who favored reticulum cell sarcoma.

The patient entered a hospital in Santa Barbara, on November 9, 1961 with obscure anemia and expired on February 16, 1962.

GROSS PATHOLOGY:

At autopsy the enlarged spleen weighed 450 gm. and the external and cut surfaces were diffusely pale-yellow, dense, and indurated to palpation suggesting diffuse replacement by malignant lymphoma or metastatic breast carcinoma.

The bone marrow of the sternum, ribs, and lumbar vertebræ showed subtotal replacement by tumor or lymphoma .

NAME: C. T. OCTOBER 1964 - CASE NO. 11

AGE: 80 SEX: Female RACE: Caucasian ACCESSION NO. 13670

CONTRIBUTOR: Thomas E. Wynn, M. D. Outside No. S64-19
Presbyterian Medical Center
San Francisco, California

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

This 80 year old white female entered the hospital on December 30, 1963, because of a progressive splenic enlargement that was first noted in July 1963. At that time only the tip of the spleen was palpated, but on this admission the spleen was 10 cm. beneath the left costal margin. For several months she had episodes of congestive heart failure. The pertinent physical findings were those of the splenomegaly and a Grade III systolic murmur heard over the precordium.

The significant laboratory studies revealed PCV 34, WBC 4,300 with a normal differential and reticulocytes 3.1%. A direct Coombs test was negative.

SURGERY:

On January 7, 1964, she underwent a splenectomy and made an uneventful recovery. At the time of surgery, only the enlarged spleen was found with no enlarged abdominal lymph nodes being noted.

GROSS PATHOLOGY:

The specimen consisted of a spleen weighing 995 gm. The capsule was thin, tense, and on section the surface appeared diffusely granular with multiple small gray nodules, measuring up to 6 mm. in diameter. These areas resembled exaggerated follicular markings. The red pulp did not scrape with ease.

NAME: M. L. M. OCTOBER 1964 - CASE NO. 12

AGE: 28 SEX: Male RACE: Caucasian ACCESSION NO. 10958

CONTRIBUTOR: William P. Snider, M. D.
Inter-Community Hospital
Covina, California

Outside No. 849-60

TISSUE FROM: Spleen

CLINICAL ABSTRACT:

History: This patient was hospitalized on May 29, 1960 with a history of progressive weakness for approximately 10 months, associated with pedal edema and a weight loss of 35 lbs. A hematologic workup by his physician had revealed pancytopenia with a WBC of 1,000 associated with hepatomegaly and splenomegaly. A splenectomy was performed. Postoperatively, the patient's course was one of progressive weakness, wight loss, fever, chills, jaundice, and bleeding tendency.

Laboratory report: Hemoglobin 11.5 gm. WBC 9,000 with a grossly normal differential (segs, 60%, bands 11%, lymphs 10%, monos 17%, myelocyte 1, metamyelocyte 1). Bone marrow aspirate: Increased numbers of reticulum cells.

GROSS PATHOLOGY:

The intact spleen weighed 2510 gm., measuring 33 x 18 x 8 cm. The capsule was thin, purple-gray and tense, without notches. The stumps of the hilar vessels were not easily identified and seemed to be thin-walled. Only a small area of the spleen, near the hilus, lacked a definite capsule. On section, the spleen was monotonously soft, light purple-red, having sparse tiny gray areas less than 1 mm. in diameter, and delicate widely spaced septa. The specimen labeled "retroperitoneal gland" consisted of two similar pieces of soft lobulated tan tissue of similar size, the largest measuring 1.9 x 1.3 x 0.9 cm. Some aspects had a thin fibrous capsule.

COURSE:

The patient expired on May 29, 1960. At autopsy, approximately 3000 cc. of turbid yellow, foul-smelling material was removed from the peritoneal cavity. The peritoneal surfaces were thickened, opaque, shaggy, and yellow in color. The ileum contained an oval, depressed ulceration, which measured 3 x 2 cm. in diameter. The base was granular and hemorrhagic with a 3 mm. perforation opening freely into the peritoneal cavity. Also noted in the wall of adjacent bowel were 5 to 10 ill-defined submucosal patches without induration or perforation. The liver edge extended to 10 cm. below the right costal margin. External and cut surfaces displayed numerous umbilicated nodules, measuring .8 to 1.5 cm. in diameter, dispersed throughout the parenchyma. Enlarged lymph nodes were present in the porta hepatis, along the lesser curvature of the stomach and para-aortic regions. These were white in color and soft in consistency. The bone marrow was extensively replaced with a whitish-yellow, soft, infiltrating tissue.

OCTOBER 1964 - CASE NO. 12

ACCESSION NO. 10958

Note: The lymph node on this case was in the July 1963 Conference, Case No. 7, Outside No. 65177, D. Tatter, M. D., Contributor.

STUDY GROUP CASES

FOR

OCTOBER 1964

CASE NO. 1, ACCESSION NO. 13482, S. M. Rabson, M. D., Contributor

LOS ANGELES:

Hodgkin's disease (post-chemotherapy status), 11.

SAN FRANCISCO:

Hodgkin's disease, 8; reticulum cell sarcoma, 2.

OAKLAND:

Focal necroses, spleen, with scattered atypical cells suggestive of Hodgkin's disease but not diagnostic, 15.

CENTRAL VALLEY:

Hodgkin's disease, 6; acute splenitis, 1.

SAN DIEGO:

Hodgkin's disease, 4; myeloid metaplasia, 1.

WEST LOS ANGELES:

Hodgkin's disease, 9.

SANTA BARBARA:

Hodgkin's sarcoma, 2; Hodgkin's granuloma, 3.

FILE DIAGNOSIS: Hodgkin's disease of spleen 520-832 F

OCTOBER 1964

CASE NO. 2, ACCESSION NO. 13427, E. R. Jennings, M. D., Contributor

LOS ANGELES:

Polycythemia rubra vera. Extramedullary hematopoiesis in spleen, including atypical myeloid metaplasia, 11.

SAN FRANCISCO:

Myeloid metaplasia of spleen, 10.

OAKLAND:

Polycythemia vera, with myeloid metaplasia of spleen (myeloproliferative disorder), 15.

CENTRAL VALLEY:

Chronic myelocytic leukemia, 7 (myeloproliferative disease).

SAN DIEGO:

Myeloid metaplasia, 2; leukemia, 2.

WEST LOS ANGELES:

Extramedullary hematopoiesis secondary to polycythemia, also fibrocongestive splenomegaly, 9.

SANTA BARBARA:

Myeloid metaplasia, 5.

FILE DIAGNOSIS:	Myeloid metaplasia, spleen	520-958 A
	Polycythemia vera	501-8271 B

OCTOBER 1964

CASE NO. 3, ACCESSION NO. 13226, Sorrell N. Glover, M. D., Contributor

LOS ANGELES:

Polycythemia rubra vera. Extramedullary hematopoiesis in spleen with highly abnormal myeloid metaplasia of bizarre type. Query atypical leukemia. (11). Cross-file: Leukemia.

SAN FRANCISCO:

Myeloid metaplasia of spleen, 10.

OAKLAND:

Polycythemia vera, with myeloid metaplasia of spleen (myeloproliferative disorder), 15.

CENTRAL VALLEY:

Extramedullary hematopoiesis, 6; myelocytic leukemia, 1.

SAN DIEGO:

Myelogenous leukemia, 2; myeloid metaplasia, 2.

WEST LOS ANGELES:

Extramedullary hematopoiesis secondary to polycythemia, 9.

SANTA BARBARA:

Myeloid metaplasia, 4; leukemia (chronic myelogenous leukemia), 1.

FILE DIAGNOSIS:	Myeloid metaplasia, spleen	520-958 A
	Polycythemia vera	501-8271 B
Cross-file:	Myelogenous leukemia	520-822 F

OCTOBER 1964

CASE NO. 4, ACCESSION NO. 12821, Dorothy Tatter, M. D., Contributor

LOS ANGELES:

Hemangioma, capillary, 11. Cross-file: Angiomatous hamartoma.

SAN FRANCISCO:

Amyloidosis, 5; hemangio-endothelioma with fibrin thrombi, 1; infarct, 1; no vote, 3.

OAKLAND:

Hemangioma, spleen, 11; amyloidosis, 1.

CENTRAL VALLEY:

Lipoidosis of the spleen, 3; amyloidosis, 3; hemangioma, sclerosing, 1.

SAN DIEGO:

Amyloidosis, 5 (associated with Waldenstrom's macroglobulinemia ?).

WEST LOS ANGELES:

Angiomatous hamartoma with sinusoidal thrombosis, 9.

SANTA BARBARA:

Lipoid granuloma with questionable amyloid, 4; fibrin thrombi in cavernous hemangioma, 1.

FILE DIAGNOSIS:	Hemangioma, spleen	520-850 A
	Angiomatous hamartoma	520-8882 A

OCTOBER 1964

CASE NO. 5, ACCESSION NO. 12570, Leo Kaplan, M. D., Contributor

LOS ANGELES:

Reticulum cell sarcoma, 11. Cross-file: Reticulum cell sarcoma with angioblastic component.

SAN FRANCISCO:

Reticulum cell sarcoma, 7; granulocytic leukemia, 1; reticulo-endothelial sarcoma, 2.

OAKLAND:

Reticulum cell sarcoma, spleen, 15.

CENTRAL VALLEY:

Reticulum cell sarcoma, 7.

SAN DIEGO:

Hemangio-endothelial sarcoma, 3; reticulum cell sarcoma, 2.

WEST LOS ANGELES:

Malignant lymphoma, reticulum cell type, 8; sarcoma of undetermined origin, 1.

SANTA BARBARA:

Reticulum cell sarcoma, 3; lymphoblastic sarcoma, 1; Hodgkin's sarcoma, 1.

FILE DIAGNOSIS: Reticulum cell sarcoma, spleen 520-831 F

Cross-file: Hemangiosarcoma, spleen 520-850 G

OCTOBER 1964

CASE NO. 6, ACCESSION NO. 12055, Howard A. Ball, M. D., Contributor

LOS ANGELES:

Cavernous and capillary (mixed) hemangioma, 11.

SAN FRANCISCO:

Angioma, 10.

OAKLAND:

Angioma, spleen (Hem-, 13; lymph-, 2) Associated Lindau's disease? 1).

CENTRAL VALLEY:

Cavernous hemangioma, 6; sinus angioma, 1.

SAN DIEGO:

Hemangiomatosis, 3; hemangiosarcoma, 2.

WEST LOS ANGELES:

Hamartoma, angiomatous type, 9.

SANTA BARBARA:

Hemangio-endothelioma, 1; congenital angiomatosis, 3; hemangioma of spleen, 1.

FILE DIAGNOSIS: Hemangioma, spleen 520-850 A

OCTOBER 1964

CASE NO. 7, ACCESSION NO. 13305, Irving Madoff, M. D., Contributor

LOS ANGELES:

Lymphangioma, cavernous, 11.

SAN FRANCISCO:

Cystic lymphangioma, 10.

OAKLAND:

Mixed hemangioma and lymphangioma, 14.

CENTRAL VALLEY:

Hemangioma of spleen, 7.

SAN DIEGO:

Angiomatosis, 2; lymphangioma, 3.

WEST LOS ANGELES:

Cavernous hemangioma (hamartoma), 3; cavernous lymph and hemangioma, 6.

SANTA BARBARA:

Lymphangioma, 5.

FILE DIAGNOSIS: Lymphangioma, spleen 520-854 A

OCTOBER 1964

CASE NO. 8, ACCESSION NO. 13799, Frank Finck, M. D., Contributor

LOS ANGELES:

Gaucher's disease, spleen, 11.

SAN FRANCISCO:

Gaucher's disease, 10.

OAKLAND:

Gaucher's disease, 15.

CENTRAL VALLEY:

Lipodystrophy, 7 (Gaucher's, 6; Nieman Pick's, 1).

SAN DIEGO:

Gaucher's disease, 5.

WEST LOS ANGELES:

Gaucher's disease, 9.

SANTA BARBARA:

Gaucher's disease, 5.

FILE DIAGNOSIS: Gaucher's disease, spleen 520-756

OCTOBER 1964

CASE NO. 9, ACCESSION NO. 11407, Donald L. Alcott, M. D., Contributor

LOS ANGELES:

Squamous-lined cyst, spleen (so-called traumatic cyst), 11.

SAN FRANCISCO:

Epidermoid inclusion cyst of spleen, 10.

OAKLAND:

Epithelial cyst of spleen, 15.

CENTRAL VALLEY:

Squamous cyst of spleen, 7.

SAN DIEGO:

Epidermoid cyst, 2; peritoneal cyst, 3.

WEST LOS ANGELES:

Metaplastic mesodermal epidermoid cyst, 9.

SANTA BARBARA:

Epidermoid cyst, spleen, 5.

FILE DIAGNOSIS: Epidermoid cyst, spleen 520-8034

Reference: Minnesota Medicine 41:614-618 and 641, 1958

OCTOBER 1964

CASE NO. 10, ACCESSION NO. 12285, A. J. McQueeney, M. D., Contributor

LOS ANGELES:

Metastatic carcinoma in spleen, compatible with origin from primary in breast, 9; reticulum cell sarcoma, spleen, 2.

SAN FRANCISCO:

Reticulum cell sarcoma, 4; metastatic carcinoma, 6.

OAKLAND:

Breast carcinoma metastatic to spleen, 8, vs. reticulum cell sarcoma, spleen, 5.

CENTRAL VALLEY:

Ductal carcinoma of the breast, 5; reticulum cell sarcoma, 2.

SAN DIEGO:

Reticulum cell sarcoma, 3; metastatic carcinoma, 2.

WEST LOS ANGELES:

Diffuse metastatic carcinoma from breast, 9.

SANTA BARBARA:

Metastatic carcinoma of the breast to the spleen, 5.

FILE DIAGNOSIS: Carcinoma of breast, metastatic to spleen 520-8000 E

OCTOBER 1964

CASE NO. 11, ACCESSION NO. 13670, Thomas E. Wynn, M. D., Contributor

LOS ANGELES:

Malignant lymphoma, lymphoblastic type, with pseudosarcoid histiocytic reaction, 11.

SAN FRANCISCO:

Sarcoidosis, 2; lymphoma with sarcoid-like lesions, 4; sarcoid-like splenomegaly, 4.

OAKLAND:

Lymphoma, spleen, with associated granulomatous response, 14; sarcoid, 1.

CENTRAL VALLEY:

Sarcoidosis, 6; pseudosarcoid lipogranulomatosis, 1.

SAN DIEGO:

Histoplasmosis, 1; sarcoidosis, 1; granulomas, undetermined etiology, 3.

WEST LOS ANGELES:

Malignant lymphoma with undetermined sarcoidal granuloma, 7; granuloma of undetermined origin, 2.

SANTA BARBARA:

Sarcoid in giant follicular lymphoma, 1; Brucellosis, 1; lymphoma, 1; granulomatous pseudolymphomatous splenitis, 1; Hodgkin's paragranuloma, 1.

FILE DIAGNOSIS: Malignant lymphoma, spleen 520-839 F

Cross-file: Sarcoidosis 520-1XO

OCTOBER 1964

CASE NO. 12, ACCESSION NO. 10958, William P. Snider, M. D., Contributor

LOS ANGELES:

Malignant lymphoma, unclassified, 11; malignant lymphoma, reticulum cell sarcoma type (monocytoid) cross-file suggested.

SAN FRANCISCO:

Tentative diagnosis pending special stains: Reticulum cell sarcoma with questionable secondary mycotic infection, 10.

OAKLAND:

Lymphosarcoma, 15.

CENTRAL VALLEY:

Hypersplenism, 2; reticulum cell sarcoma, 3; no vote, 2.

SAN DIEGO:

Malignant lymphoma, 3; leukemic infiltration, 2.

WEST LOS ANGELES:

Malignant lymphoma, pleomorphic type, 4; hypercellular spleen with proliferative disorder (lesion unclassified), 5.

SANTA BARBARA:

Hodgkin's disease, 3; reticulum cell sarcoma, 1; hypersplenism with atypical reticulo-endothelial hyperplasia, 1.

FILE DIAGNOSIS: Malignant lymphoma, unclassified, spleen 520-839 F

Cross-file: Reticulum cell sarcoma, spleen 520-831 F