Set 91

UNUSUAL BONE AND SOFT TISSUE LESIONS

Department of Surgical Pathology
Barnes Hospital

October 6, 1955

CASE 1 D.D., S.P. 55-4847

The patient, a 27 year old male, noted a tender swelling in the buttock ten days before operation. In June 1951, as a paratrooper, he suffered a bruising injury to the left hip. On July 6, 1955, at exploration a tumor was found in the rgion of the left acetabulum which one surgeon thought to be related to periosteum. Tumor appeared to be partially encapsulated and measured 2.5 x 2.0 x 1.0 cm. The surface was moist, soft, and glistening.

CASE 2 M.H., S.P. 55-2830

The patient, a 39 year old female, had a tumor of five years duration that began to enlarge gradually. It measured about 5 cm. At the time of operation a pesudo-encapsulated mass was found which eroded both the tibia and talus. The surgeon thought the tumor penetrated the marrow space and was invading muscle.

CASE 3 M.T., S.P. 55-3090

This 28 year old Negro woman was seen in 1950 because of a 10 x 10 x 6 cm. soft tissue mass over the upper third of her arm. This mass had appeared six months previously following minor trauma. Biopsy and wide local excision with skin graft were done with a diagnosis of desmoid (low grade fibrosarcoma). Tumor was present at one edge of the specimen. Three years later (1953) a mass was noted just above the site of the first excision, and wide local excision was again done after biopsy. In April 1955 she was seen with a large mass in the soft tissue over the right shoulder posteriorly. This had been present for about nine months. At no time were there any demonstrable changes in the bones on x-ray examination.

CASE 4 R.H., S.P. 55-2723

This 32 year old woman went to her physician for a routine pelvic examination, and during the course of this examination a large bony mass was found attached to the inferior ramus of the pubis and ischium.

CASE 5 L.O., S.P. 55-5583

This 63 year old, white, married female developed a pain in low back 5 years ago. She played in an orchestra and was able to continue with her activities up until about 18 months ago at which time she had to discontinue her activities because of the low back, hip, and knee pain. At this same time she noted she was losing a considerable amount of weight, estimated by her to be 100 pounds until the time she was admitted to the hospital. At this time her friends noticed she appeared shorter.

Case 5 (cont'd) She was unable to use her teeth because she felt that her jaws were getting larger. She was confined to her home until November, at which time because of such severe back and hip pains she went to see her local osteopath who prescribed cortisone and ACTH simultaneously without relief. By this time she was xxable to get around the house only with crutches, and she was up only for her meals. Two months before admission she bumped her left forearm and because it was painful and swollen she went to see her osteopath again, who took x-rays and told her he could not see anything, but if it continued she should return. On July 15 she went to see one of our local orthopedic surgeons who recommended admission to the hospital. At this time the patient was unable to walk without the aid of crutches, and her main complaints were severe low back pain, bilateral hip and knee pain, a pain in her fingers, and nocturia (4 to 5 times), and urgency. On physical examination she was a very short lady with a rather large head and prominent forehead. She had a prominent kyphosis and was bowlegged. She had limitation of motion in her hips and knees and shoulders. On abdominal examination a mass was felt 4 to 5 cm. below the costal margin. Lab work at this time showed calcium 13.2, phosphorus 2.7, alkaling phosphatase 11.6 Bodensky units, NPN 33. Retrograde pyelograms were negative. An 11 cm. mass was seen on the flat plate of the abdomen which was in the region of the right kidney. The next day she had a biopsy of the lesion in the left ulna.

CASE 6 K.S., S.P. 50-4921 & 55-2229

The patient, a nine year old girl, was seen in March 1955 because of pain in her left leg for several weeks. Therewas no history of trauma. X-rays disclosed rather extensive involvement of the shaft of the tibia.

CASE 7 S.P. 55-3870

This 58 year old man sustained fracures of the left tibia and several ribs ten weeks prior to admission. X-rays of the pelvis showed diffuse sclerotic changes over one hemipelvis. A biopsy of the ilium near the acetabulum was done.

CASE 8 T.C., S.P. 55-2252

The patient, a 32 year old white man, had a vague intermittent aching in the region of the left hip for several years. This pain was aggregated by motion of the hip. There was no local swelling. X-rays disclosed an osteolytic lesion in the trochanteric region of the left femur. Calcium, phosphorus, and alkaline phosphatase determinations were normal.

CASE 9 R.W., S.P. 55-5193

The patient, a 45 year old male, sustained a spiral fracutre of the femur on 6/23/55. He was swinging at a baseball and missed. At operation there was a cystic lesion present which contained firm, slightly granular, brownish-red to gray tissue. The apparent tumor tissue herniated into the soft tissue.

SEM. 91

CASE 1

Dopp, Donald Age 27 WASHINGTON UNIVERSITY MEDICAL SCHOOL

from Dr. J. G. Weinbaum

Union Hospital

Terre Haute, Indiana LABORATORY OF SURGICAL PATHOLOGY

Diagnosis At request of Dr. H. W. Dopp, Jr. Surg. Path. No. 55 4847

Hosp. No. U.S. Civ.

Soft tissue, left buttock, excision - Myositis ossificans Date 7-6-55

Diagnosis Not stated

Hospital

History: Color ? Sex Male

Male ?

Date Site of Symptoms:

patient noticed a tender swelling in his left buttock approximately ten days before operation. He was a paratrooper in the Korean war and in June 1951 sustained a bruising injury to his left hip. X-rays revealed no bone changes. At operation a tumor was found in the region of the left acetabulum which one surgeon believed to be related to periosteum. The other surgeon could not be sure that the tumor was attached to bone. 1552-A represents sections from a 2.5 x 2.0 x 1.0 cm. tumor which appeared to be partially encapsulated. The cut surface was solid, moist, white and glistening. 1552-B represents bits of tissue that was submitted with the main tumor. Not all of the tumor was removed at surgery.

Gross Pathology: The specimen consists of two slides, labeled 1552-A and 1552-B, and wet tissue sent in by Dr. J. G. Weinbaum, Union Hospital, Terre Haute, Indiana, at the request of Dr. H. W. Bopp, Jr.

Microscopic Pathology: In spite of the cellularity and aggressive appearance this tumor we believe it is a benign lesion and can be classified as myositis ossificans. The principal tumor mass is composed of intermixing strands and whorls of spindle or stellate hyperchromatic stromal cells. In many ill-defined foci the arrangement is looser and the cells appear to be forming cartilage or osteoid. Mitoses are seen occasionally. Sections from the periphery disclose formation of bony trabeculae and adult cartilage. The bone formation is orderly and the trabeculae are well oriented. It is principally the appearance of the bone formation and our past experience with several similar cases that make us consider this a benign lesion. We suspect that most of this process is secondary to trauma and periosteal reaction with formation of a mass. We saw another case similar to this in which only biopsy was done, and five years later the patient was well. It should also be remembered that if a patient develops a sarcoma of this area, chances of cure by any surgery, even hemipelvectomy, is practically zero.

Diagnosis: Soft tissue, left buttock, excision - Myositis ossificans ???

Lauren V. Ackerman, M.D.

CASE 2

Tyree, Mary C.
Ward Dr. John D. Bauer
DeBaud Hospital
St. Louis, Mo.

Age 39

WASHINGTON UNIVERSITY MEDICAL SCHOOL

LABORATORY OF SURGICAL PATHOLOGY

Surg. Path. No. 55 2830

Hosp. No. O.S.Slide

Date 7-15-55

agnosis

Soft tissue, ankle, excision - Giant cell tumor, tendon sheath (Fibrous xanthoma)

Diagnosis

Hospital

atient's address: 8436 Halls Ferry Road, St. Louis 15, Mo.

History: Color ? Sex Female

State ?

nd Site of Symptoms:

Slides of a tumor of the left ankle. History dates back five years, during which time the tumor appeared to enlarge gradually. There was no pain unless after traumatization. At operation a pseudo-encapsulated tumor was found which eroded both tibia and talus. Surgeon was of opinion that the tumor penetrated the marrow space.

Gross Pathology: The specimen consists of 2 slides labeled 2392, submitted by Dr. John D. Bauer, DePaul Hospital, St. Louis, Mo., stated to be from a tumor of the left ankle.

Microscopic Pathology: The sections show an extremely cellular lesion with variagated pattern. Many of the cells have a foamy cytoplasm, and there are also collections of giant cells. Vascularity is prominent, giving an impression at times of pseudo-acini. Individual cells in some zones have rather plump vesicular nuclei. It is of interest that although highly cellular, mitotic activity is minimal. Hemosiderin pigment is also present, and there are zones which suggest that this tumor entered a joint space or bursa.

This is certainly a difficult lesion to interpret, but its location, duration, and microscopic pattern fit this into a group often designated as giant cell tumor of tendon sheath or villinodular synovitis. As Jaffe has indicated, these are probably variants of the same process. I doubt if this is a true neoplasm. I believe that it is perfectly benign and that no further treatment is necessary. We have seen lesions of this type locally recur, but this does not mean they are malignant.

Diagnosis: Soft tissue, ankle, excision - Giant cell tumor, tendon sheath (Fibrous xanthoma), extremely cellular

Lauren V. Ackerman, M.D.

CASE 3

TAYBORN, Margaret

[illegible]Tayborn, Margaret

[illegible]42 A Easton, St. Louis, Missouri

[illegible]iagnosis

[illegible]issue, shoulder, excision-Desmoid

[illegible]houlder, excision-Keloid

Age 33

WASHINGTON UNIVERSITY MEDICAL SCHOOL

LABORATORY OF SURGICAL PATHOLOGY

Surg. Path. No. 55 3090

Hosp. No. 8-0-55-00227

Date 4-29-55

[illegible]cal Diagnosis Desmoid

[illegible]ation Excision tumor of shoulder

[illegible]ator Dr. Stein Hospital Barnard

[illegible]cal History: Color Col Sex Female

[illegible]al State M.

[illegible]on and Site of Symptoms: Excision desmoid mid-humeral region-1950. Excision. persistant [illegible]smoid upper humeral region 1953. Large biopsy proven desmoid over post. shoulder on same [illegible]de

Gross Pathology: The specimen is said to consist of a desmoid removed from the right posterior shoulder region. It is noted to be a large mass of somewhat rubbery, grey-white tumor tissue which is homogeneous in its consistency and contains over one edge a piece of skin and a considerable amount of attached muscle. The specimen weighs 825 gms. and has a roughlyelliptical piece of skin over one surface measuring 21x6 cm. In the central portion of this skin running obliquely, there is a 7 cm. healing incisional scar with sutures in place. Parallel to this and along the distal border of the skin is a keloid measuring 1.5 cm. in width and 10 cm. in length. On cut section, the tumor mass appears in the shape of a flattened sphere of apparent muscle or soft tissue surrounding on all sides. There is a tail-like projection of muscle or soft tissue surrounding on all sides. There is a tail-like projection of muscle from one end of the specimen with a suture marking site of resection of the deltoid muscle on the humerus. At this point, there was suspicious looking material at operationand sections will be taken from here for adequacy. A separate bottle of tissue is also submitted and is noted to contain multiple chips of bone removed from the humerus at the site of excision of the insertion of the deltoid muscle. These chips of bone are placed in sequestrene for decalcification. The remainder of the specimen is placed in formalin for fixation prior to taking further sections. Sections are taken as follows:

A - Section through the tumor including the deep surface of the tumor and adjacent muscle in the distal half deep surface mid line tumor.
B - Section taken through the biopsy tract in a plane perpendicular to the biopsy tract including skin and tumor throughout the depth of the biopsy incision.
C - Is a specimen to include skin with the attached keloid and a small amount of underlying soft tissue.
D - Is a section from what was thought to be tumor at the insertion of deltoid muscle on the humerus. This site had been marked by silk suture. (On cutting tumor at this region there was noted to be grey-white streak of fibrous appearing tissue extending from the main body of the tumor out to this nodule).

Gross Pathology: (Cont'd)

E - Includes tumor with underlying fascia (the deep fascia of the deltoid muscle).
F - Is noted to consist of many bone fragments taken from the site of deltoid insertion on the humerus. These are submitted for decalcification in sequestrene prior to further examination. Jar II (Cunningham)

Microscopic Pathology: Sections show a desmoid with invasion of muscle and fascia. The tumor shows essentially the same appearance as the two previous tumors from this patient's arm. There is noted to be tumor adjacent to the bone at the insertion of the deltoid muscle on the humerus, but no invasion of the bone itself is detected. The tumor appears elsewhere to have been adequately excised.

Diagnosis:
(1) Soft tissue, shoulder, excision - Desmoid
Skin, shoulder, excision - Keloid

Lauren V. Ackerman, M.D.

MAY 25 19

CASE 4

Name Hoover, Rose
From Dr. H. D. Ellis
Address St. Vincent Hospital
Santa Fe, New Mexico

Age 32

WASHINGTON UNIVERSITY MEDICAL SCHOOL

LABORATORY OF SURGICAL PATHOLOGY

Surg. Path. No. 55 2723

Hosp. No. U.S. Slide

Date 4-19-55

Final Diagnosis

Bone, pubis - Xanthofibroma

Clinical Diagnosis Not stated

Operation

Operator Hospital

Clinical History: Color ? Sex Female

Marital State Married

Duration and Site of Symptoms:

Tumor involves the inferior ramus of the pubis.

Gross Pathology: The specimen consists of three slides, labeled 10001, submitted by Dr. H. D. Ellis, St. Vincent Hospital, Santa Fe, New Mexico.

Microscopic Pathology: This is a very unusual bone lesion in our experience. It does not fit any of the usual types of bone lesions. It is certainly not a giant cell tumor, which invariably has vascularized stroma and giant cells. This lesion has considerable connective tissue and at times has a pattern which we see in the so-called non-osteogenic fibromas of Jaffe. However, this is very much larger and contains large numbers of foam cells, plasma cells and foreign-body giant cells. I presume there are no other lesions. The question now is what should we call it. I think the term that would closest fit the problem would be xanthofibroma. We would expect the prognosis to be excellent. If the patient develops any other lesions, we would be interested in hearing about them.

Diagnosis: Bone, pubis - Xanthofibroma vs. fibroxanthosarcoma -

[signature]

Lauren V. Ackerman, M.D.

CASE 5

Age 63

WASHINGTON UNIVERSITY MEDICAL SCHOOL

LABORATORY OF SURGICAL PATHOLOGY

[illegible]stein, Lolia

[illegible] 3208 Carson Rd.

Surg. Path. No. 55 5583

Diagnosis

Hosp. No. 1-0-55-06125

[illegible]thyroid, excision - Adenoma

Date

8-1-55

[illegible] Diagnosis Hyperperothyroid

[illegible]on Perathyroidectomy

[illegible]r Dr. Bricker Hospital Barnes

[illegible] History: Color Wh Sex F

[illegible] State M

[illegible] and Site of Symptoms:

[illegible]marathyroid.

Gross Pathology: The specimen is stated to be parathyroid adenoma. The specimen measures 7 cm. in longest diameter and 4 cm. in width. There is a dumb-bell extension measuring 3.4 cm. and the width is 1 cm. The gland weighs 20 grams and surface is smooth with areas of punctate hemorrhage interlacing the dusky brown surface. The gland is extremely soft and there are areas which are a white to a light grey in color and on cut sectioning ducts and cysts are present. The sections are taken from the posterior aspect of the gland so that we could preserve the gland for demonstration purposes. Photographs are taken and representative specimens are placed in Zenker's acetic and formalin. Jar II (Stamp)

Microscopic Pathology: This is a parathyroid adenoma composed of numerous nests of chief cells separated by a scanty, highly vascular stroma. There is no tendency to trabecular growth pattern. Slight variation in nuclear size with an occasional large nucleus is seen; however, mitotic figures are not evident.

Diagnosis: Parathyroid, excision - Adenoma.
(1)

Lauren V. Ackerman, M.D.

CASE 6

SURG. PATH. No. V 50 1921

WASHINGTON UNIVERSITY MEDICAL SCHOOL

SURG. No.

LABORATORY OF SURGICAL PATHOLOGY

OTHER S. P. Nos. Children's

-28-50

Final Diagnosis: Skin, scalp - Lymphosarcoma

Illustrations

Name Sinnger, Karen Address

Physician Address

Operator Dr. Byars Address

Clinical Diagnosis: Lymphosarcoma?

Operation: Date 10-28-50 Place Children's

Excision biopsy and

skin graft

Clinical History: Color W Sex F Age 5

Marital State S Occupation

Duration and Site of Symptoms:

On June 9, 1950 patient bumped her forehead. Bump on head has persisted and recently began to enlarge. Has been biopsied previously.

Gross Pathology: The specimen consists of a roughly oval-shaped portion of skin, said to have been excised from the scalp. It measures 5x½ cm. and contains in its center a healing scar measuring 3 cm. in length and containing several interrupted silk sutures. There is subcutaneous tissue beneath the skin; it seems to go down to the aponeurosis of the scalp. On cross section through the scar there can be seen, extending 1 cm. from each side of the scar, a whitish area which is soft, fairly well delineated, and extends down to the galea. Representative sections were taken, labeled:

A-cross section.
B-longitudinal section through the end of the specimen.

Formalin Jar I (Walker).

Microscopic Pathology: This process involves the dermis, leaving a clear area of non-involvement between the mass and the epidermis. The process extends the entire depth of the excision. The individual cells are all the same, with prominent nuclei and vesicular cytoplasm. This lesion has to be classified as a lymphoma. Dermatopathologists might put this in the Spiegler-Fendt sarcoid group. I have seen such lesions cured by simple excision; however, any statement regarding the prognosis is not justified. The patient must be followed closely.

Diagnosis: Skin, scalp - Lymphosarcoma.

addendum: This child developed a painful lesion in left tibia in February, 1955.
Diagnosis - lymphosarcoma
S.P. # 55-2229

Lauren V. Ackerman, M.D.

CASE 6 (CONT.)

Simmingar, Karen
From Dr. Henry Halley
St. Joseph Hospital
Alton, Illinois

Age 9

WASHINGTON UNIVERSITY MEDICAL SCHOOL

LABORATORY OF SURGICAL PATHOLOGY

Surg. Path. No. 55 2229

Hosp. No. ~~O.S. Slide~~

Date 3-31-55

Diagnosis

Bone, tibia - Lymphosarcoma

al Diagnosis Osteomyelitis & Neuroblastoma

ion Biopsy

ar Hospital

l History: Color ? Sex Female

State Single

and Site of Symptoms:

Lesion is from the left tibia which was altered by a change thought most likely to be an osteomyelitis by the radiologist, but upon biopsy was found to be Tumor tissue apparently involving the shaft of the bone within and extending through the cortex. Dr. Hagebusch sent slides from this patient to Barnes Hospital about five years ago (S.P. #50-4921), from a lesion reported to have been removed from her scalp. The child apparently has been well until recent weeks when her left leg began giving her some pain and discomfort, and x-rays disclosed a rather extensive involvement of the shaft of the tibia. There is no obvious primary tumor present at this time and the child is healthy except for her leg without palpable lymph node, liver or spleen tumor mass, is not anemic, without fever

Gross Pathology: The specimen consists of one slide and one paraffin block of tissue labeled 23172 submitted by Dr. Henry Kelley, St. Joseph Hospital, Alton, Illinois.

Microscopic Pathology: The sections submitted display dense sheets of cells having indistinct cellular borders, eosinophilic cytoplasm, large irregular nuclei with fine chromatin and occasional small nucleoli. Scattered mitotic figures are seen. Dense reticulum fibers are present, which set off clusters of cells. Considerable fibrosis is present. We saw this case before in 1950 (our number 50-4921) for the skin nodule which was called lymphosarcoma. But at that time the child had no peripheral blood findings and was in good health. We are therefore amazed by the sequence of events. We think this child should have a thorough course of irradiation to the leg. I assume that the other films of the skeletal series are negative. We would certainly like to know the differential white blood count, and we think a bone marrow study should be done. I would consider this child will eventually die of disseminated lymphosarcoma, but the course certainly has been peculiar to date, and any prediction is pure speculation.

Diagnosis: Bone, tibia - Lymphosarcoma

Lauren V. Ackerman, M.D.

CASE 7

...e From Dr. Vernon Pettit
Paducah, Kentucky

Age 53

WASHINGTON UNIVERSITY MEDICAL SCHOOL

LABORATORY OF SURGICAL PATHOLOGY

...ress

...l Diagnosis

Surg. Path. No. 55 3820

Hosp. No. 07 81486

Bone, pelvis - Paget's disease

Date 6-2-55

...ical Diagnosis Not stated

...ration

...rator

Hospital

...ical History: Color ? Sex Male

...tal State ?

...tion and Site of Symptoms:

Patient had fractured his left tibia and right ribs 10 weeks before. A biopsy of the ilium medially and laterally to the acetabulum was done.

Gross Pathology: This specimen consists of four slides, numbered 1183, submitted by Dr. Vernon Pettit, Paducah, Kentucky.

Microscopic Pathology: The microscopic appearance is characteristic of Paget's disease. The bone trabeculae are dense without much evidence of Haversian systems. Bone lamellae are irregular and the cement lines have little orderly pattern of arrangement. Both osteoclastic and osteoblastic activity is present. There is some fibrosis within the intertrabecular spaces.

On the basis of the films, metastatic malignancy, particularly prostate, can be confused with or even accompanying Paget's disease. The presence of other fractures is also compatible with Paget's because of poor structural quality of the bones.

We would like to use this case for the seminar for orthopedic surgeons, and would like to have the films of the other fractures which might confuse them.

Diagnosis: Bone, pelvis - Paget's disease NO SLIDE

LVV

Lauren V. Ackerman, M.D.

CASE 8

Collins, Theodora
Dr. Henry Talley
St. Joseph Hospital
Alton, Illinois

Age 32 WASHINGTON UNIVERSITY MEDICAL SCHOOL

LABORATORY OF SURGICAL PATHOLOGY

Surg. Path. No. 55 2252

Hosp. No. O.S. Slide

Date 4-1-55

Diagnosis

Bone, femur - Chondrosarcoma

Diagnosis Chondroblastoma (radiologist)

Hospital

History: Color ? Sex Male

State ?

and Site of Symptoms:

Patient, admitted March 3, 1955 and discharged March 14 following, complaining of vague, intermittent slight pain several years in the region of the left hip. Pain was steady and aggravated by sitting down and getting up. There was no swelling. X-ray disclosed an osteolytic lesion in the region of the trochanters of the left femur posteriallly, diagnosed as chondroblastoma by the radiologist. Calcium, phosphorus and alkaline phosphatase were normal.

Gross Pathology: The specimen consists of three irregular fragments of bony tissue, two of which measure 1.5 x 1 x 1 cm.; the third measures 6 mm. in all dimensions. The surface of all fragments is covered with friable translucent, white material, cartilaginous in consistency.

Microscopic Pathology: These sections show well differentiated cartilage cells, considerable calcification, some osteoid formation and foci of ossification. Multiple nuclei and cellular irregularity, although not pronounced, are non the less evident. These atypical changes indicate that this is a chondrosarcoma. I have never seen an enchondroma in this location The histological pattern is not that of a chondroblastoma. With the tumor in this location, hemipelvectomy is indicated, since disarticulation may increase the likelihood of persistence of tumor in the stump.

Diagnosis: Bone, Femur - Chondrosarcoma

Lauren V. Ackerman, M.D.

Addendum: 4-19-55
Since these sections were reviewed, we have been able to obtain the cortical bone. This also shows tumor invading cortical bone. I personally am convinced this is a chondrosarcoma. If nothing further is done, the possibility of tumor regrowing in the bone and/or in the soft tissue appears high. I doubt if there are distant metastases at the moment. I feel that the risk is great enough so that definitive surgery must be done within the near future. We are happy to send the sections to Dr. Jaffe, who has had considerable experience with this type of tumor. However we have reviewed 40 of our chondrosarcomas, and I feel stubborn enough to hold to my opinion on this case, no matter if disagreement occurs. Enclosed is a copy of one of our papers.

Lauren V. Ackerman, M.D.

Letter from Dr. Henry L. Jaffe May 5, 1955

"I feel as you do that you are dealing with an evolving chondrosar... The chondrosarcoma is apparently developing out of the pre-existing benign cartilage growth. I believe that a recurrence is to be expected.

"In regard to therapy, I would favor a somewhat conservative appro... at this time. I am inclined to think that one might try to get away with even less than a massive resection of the upper end of the femur and the intr... duction of a metal prosthesis. That could be, in this case, a resection osteotomy of the affected area and removal of all the soft parts that were in contact with the lesional area originally. This would give an inch or two of shortening but the man would continue to have his limb and would avoid the hazards and chronic morbidity associated with the introduction of a metal prosthesis. Should there be a recurrence after radical local excisio... of the tumor, a disarticulation will probably have to be done."

CASE 9

[illegible], Ray

[illegible] M. D. Hart

United Rico Citizens' Hospital

[illegible], [illegible]

Age 45 WASHINGTON UNIVERSITY MEDICAL SCHOOL

LABORATORY OF SURGICAL PATHOLOGY

Surg. Path. No. 55 5193

Hosp. No. [illegible]

Date 7-22-55

[illegible]osis

[illegible], femur, excision - Neurilemoma

Diagnosis Not stated

Excision

Hospital

[illegible]story: Color White Sex Male

[illegible]ate ?

[illegible]nd Site of Symptoms:

Sustained spiral fracture of right femur on June 23, 1955, while swinging at a baseball--which he missed. There has been no previous or recent illnesses and the patient had been actively employed as a railroad employee. Approximately 8 months prior to this injury, the patient was seen in the San Francisco Southern Pacific Railroad Hospital for a complaint of pain in the right pelvis radiating down the right thigh. No diagnosis was made and the patient was dismissed without treatment. Roentgenograms include films made on admission to the hospital and also operative room films. There is an oblique fracture at the junction of the middle and proximal thirds of the right femur. There is also a cyst-like bone defect that apparently contributed to this fracture. Otherwise the bone structure appears normal. Physicial findings and laboratory data were entirely negative. On June 28 there was an open reduction of the right femur with application of some kind of hardware and at this operation the bone cyst was visualized and curetted. The tissue was relatively firm and slightly granular and brownish-red to yellowish-Grey. There were scattered cystic areas and at the site of the oblique fracture there was herniation in a dumb-bell fashion of tumor tissue into the soft tissue. The cystic area of the bone measured approximately 3 cm. in diameter and the contiguous soft tissue was with delicate pedicle-like connection to the bone cyst measured approximately 6.5 cm. in diameter.

GROSS PATHOLOGY: The specimen consists of 7 slides and wet tissue labeled 1599-55
1599-55, and four roentgenograms, all submitted by Dr. M. S. Hart, Hotel Dieu Sisters' Hospital, El Paso, Texas. The roentgenograms are returned, as requested.

MICROSCOPIC PATHOLOGY: We agree with you that the lesion is a neurilemoma and its location within the femur certainly makes it worthy of publication. There has been a case report of a similar lesion in the humerus by Gross.

Your sections demonstrate beautifully the typical palisading of nuclei, the Verocoy bodies, Antoni A and B regions, and multiple foci of cystic degeneration. There are also the thick-walled blood vessels often associated with these benign tumors.

We do not believe the lesion is associated with trauma nor that it has the features of a traumatic neuroma. We believe that this tumor arose from a nerve filament which probably entered with nutrient vessels. The location of your lesion is compatible wit h this.

DIAGNOSIS: Bone, femur, excision - Neurilemoma

REFERENCE: Gross, Paul; Bailey, Frank R.; & Jacox, Herold W.; Primary intramedullary neurofibroma of the humerus. Arch. Path. 28:716-718, 1939.

Lauren V. Ackerman, M.D.