

#14

HOSPITAL ROSALES

DEPARTAMENTO DE ANATOMIA PATOLOGICA

San Salvador, El Salvador, C. A.

February 12, 1962

Dr. Lauren V. Ackerman
St. Louis, Mo.
U. S. A.

Dear Dr. Ackerman:

I am the pathologist who prepared the seminar on bone tumors. Thank you, very much, for your comments on it, and I want to apologize because of the defects of X-ray films.

In relation with the cases I can say that in most of them Dr. Miguel Schulz, from México, Dr. Carlos Restrepo, from Colombia, and myself agreed with your diagnoses.

In the case No. 3 we thought that the lesion was related with some kind of cementoma; but after reading your comment and study carefully the article of Pindborg we changed the histological diagnosis.

In the case No. 15 we think that the lesion is a giant cell tumor, benign, with some peculiar morphological features which do not change the prognosis and treatment.

Thank you for your help and I am very proud to have your comment in our own seminar.

Sincerely yours,

Dr. José Nicolás Astacio

February 15, 1962

Dr. Roberto Porras P.
Ortopedia y Traumatologia
I.A. C. P. No. 1214
San Salvador
El Salvador

Dear Doctor Porras:

I am very glad to hear from you and have your comments about the seminar. I hate to be stubborn but the clinical history, that is age, orbital involvement and pattern is that of a neuroblastoma. You would have to send me sections of the Wilms' tumor to get me to give in.

I am glad that everything is settled about the meeting in 1963 and I will start studying my Spanish. I hope, from what you said, that you will now send me a complete set of slides of your seminar. Dr. Reynolds doesn't need them but I do.

Best wishes.

Sincerely,

LVA:vl

Lauren V. Ackerman, M.D.

San Salvador, February 11, 1962.

Lauren V. Ackerman, M.D.
Barnes Hospital
St. Louis, Mo.
U.S.A.

Dear Dr. Ackerman:

I am very sorry for what had happend, miss Lord has nothing to do with it, and I apologize to both of you; I was in such a hurry to take my plane back home that I forgot to give the other set of slides to Dr. Reynolds; I thought I had given them to him.

The Bone Seminar is over and I think was a success; we had two pathologists from México and Colombia as guests and they did the comments at the end of each case, your diagnosis and comment were read as the final touch of every case and there was only one in which they do not agree with you; besides case # 12 was originated on a Wilms' tumor. Case # 14 was operated on and a wide resèction was done, however it was found there were malignant cells on the edges of resected bone, so an amputation was carried out. The case # 15 had to ~~be~~ underwent an amputation also, because of tednical difficulties at the time of surgery.

Enclosed you will find a letter from Dr. Astacio with his final comments and thanks for your opinion.

By the way the copy of the first X ray film was mistaken and now I am sending the real one with the rest of them. Please let me know if you get them.

I talked to Dr. Astacio about the invitation they sent to you of coming here in December 1963, and now I can assure you they will pay your transportation so you can fly over here at that time, if you are not mad at me I will be glad of being your host, will you?

Thank you for the work you did for us and if you have the same good will I would like to send you interesting cases from time to time.

Forgive me for the trouble I caused you

with my best wishes for you and your family



February 15, 1962

Dr. Jose Nicolas Astacio
Hospital Rosales
Departamento de Anatomia Patologica
San Salvador, El Salvador, C. A.

Dear Doctor Astacio:

I thank you for your letter concerning the Seminar. I think that your case, No. 15, is of great interest and deserves extremely careful study. As the patient has had an amputation, this should be possible. I suggest that you send this case to Dr. Jaffe for his opinion. If you hear from him, would you mind sending me a copy of what he thinks? Your cases were of very great interest and were very well prepared.

Sincerely yours,

LVA:vl

Lauren V. Ackerman, M.D.
Professor of Surgical Pathology
and Pathology

Case #1 (62-733)

HISTORY: The patient is a 4 year and 3 month old boy who for the past month had had a hard mass present involving the right cheek and submaxillary region. The mass had a smooth surface and is estimated to measure 10 x 6 x 6 cm. The mass was in contact with the underlying bone. Serum calcium was 10.8 mg.% and phosphorus 5.1 mg.%. Biopsy of the lesion was taken and then resection

performed. One month later, there was recurrence of the tumor. *A black and white transparency ~~is present~~ of the X-ray is present on our Kodachrome file.*

MICROSCOPIC: The pattern is that of an aneurysmal bone cyst with dilated spaces filled with blood and with apposing strands of vascular connective tissue lined by giant cells. This lesion is rare in this bone. We considered, in our differential diagnosis, traumatic hemorrhagic cyst, hyperparathyroidism and reparative granuloma.

DIAGNOSIS: Bone, maxilla - Aneurysmal bone cyst

Case #2 (62-734)

HISTORY: The patient is a 45 year old male who was first seen in March 1956, with a small nodule on the left side of the jaw, which had been present since 1940. The nodule had been growing slowly. There ^{was} is no pain, but there was occasional bleeding at the site of one back tooth root. The patient had resections in 1956, 1957, 1959 and 1961 for recurrent disease. A black and white transparency of the x-ray is present in our Kodachrome file.

MICROSCOPIC: This is a classic ameloblastoma which was apparently ^eenucleated rather than resected. This lesion is aggressive and initial therapy should be aimed at local resection.

DIAGNOSIS: Bone, mandible - Ameloblastoma

Case #3 (62-735)

HISTORY: The patient is a 34 year old male who was first seen in October 1959 because of a tumor of the left side of the mandible which had appeared three years ^{previously,} ~~before~~ following a tooth extraction. In 1958, the tumor was removed elsewhere, but three months later it began to grow again. The first time he was seen at a local hospital, ^{the} ~~The~~ tumor measured 3 cm. in its greatest diameter. It had a hard consistency and was slightly painful. Following 1958, he had five surgical resections, the last one being on September 1961. A black and white transparency of the x-ray is present in our Kodachrome file.

MICROSCOPIC: I believe this to be a non-calcifying stage or variant of the epithelial odontogenic tumor described ^{by} Pindborg. A fundamental difference between this tumor and odontomas is the formation of extra-cellular calcification in the latter, for the former appears to calcify as a result of intra-cellular calcification, or intra-cellular degeneration and subsequent calcification. In the present tumor, the nucleus appears to undergo pyknosis or karyolysis while maintaining its position near the center of the cell. Calcification has not yet occurred in this lesion, although there are areas which are turning slightly basophilic, suggesting that calcification might not be far off.

Buccal, mandible -

DIAGNOSIS: Epithelial odontogenic tumor of Pindborg, a non-calcifying stage or variant

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Case #4 (62-736)

HISTORY: The patient is a 9 year 9 month old boy who was first seen in September 1961 because of a tumor of the left side of the maxilla, occupying the submaxillary region. The lesion was in contact with or involving bone. A few days previously, a dentist had removed two teeth. Total excision of the mass was performed. A black and white transparency of the x-rays on this case are in our Kodachrome file.

MICROSCOPIC: There is a small amount of ameloblastic epithelium present with surrounding fibrous stroma. I do not feel that this is the major part of the lesion. The remainder of the lesion is benign osteoblastoma (giant osteoid osteoma). There is a nidus which is highly vascular with abundant osteoid and bone formation. Osteoblastic activity is prominent.

DIAGNOSIS: Bone, maxilla - Benign osteoblastoma

Case #5 (62-737)

HISTORY: This 43 year old male was first seen in July 1959 with a tumor mass in the right side of the nose which was invading posteriorly into the pharynx and involving the Eustachian tube. It was an irregular, friable, easily-bleeding mass. The mass was first removed in August 1959. There have been several recurrences since that first intervention. A black and white transparency of the x-rays in this case is present in our Kodachrome file.

MICROSCOPIC: This is an adenoid cystic carcinoma. The lesion is one of the commoner malignancies arising from salivary gland, and can arise anywhere there is either major or minor salivary gland tissue such as the nares. It is difficult to remove this tumor completely. Fortunately, irradiation offers considerable palliation. Silent pulmonary metastases frequently occur.

DIAGNOSIS: Nasal cavity - Adenoid cystic carcinoma

Case #6 (62-738)

HISTORY: The patient is a 61 year old male who was seen in February 1961 with a mass overlying the right cheek bone and attached to it. There was some bleeding from the mass which had been present for one month. Resection of the lesion was performed. A black and white transparency of the x-ray is present in our Kodachrome file.

MICROSCOPIC: This tumor is a plasma cell myeloma and the tumor submitted probably represents soft tissue extension of an underlying bony lesion. Skeletal survey, serum electrophoresis and bone marrow aspirate are well-indicated in cases such as this. We have seen such soft tissue extension many times in multiple myeloma involving skull, ribs and long bones.

DIAGNOSIS: Soft tissue, face - Plasma cell myeloma

Case #7 (62-739)

HISTORY: The patient is a 41 year old female who had back pain in May 1960, which was believed due to herniated nucleus pulposus. The pain disappeared following removal of the herniated disc, but recurred in December of the same year. By February 1961, the back pain had become more severe and there was hypesthesia of both thighs. Alkaline phosphatase at that time was 24.8 Bodansky units. In April 1961, she was explored and there was found to be a grey, firm tumor mass involving the sacrum. Chordotomy was performed. A black and white transparency of the x-ray on this case is present in our Kodachrome file.

MICROSCOPIC: We believe this is a classic osteosarcoma. When this lesion is present in the region of the pelvis, even when the patient is apparently operable (hemipelvectomy), we doubt if this operation is ever indicated because of the extremely poor results.

DIAGNOSIS: Bone, sacrum - Osteosarcoma

Case #8 (62-740)

HISTORY: This 15 year old male has a history of a slowly-growing mass at the lower end of the sternum since he was 2 years of age. At the time he was seen in 1961, the mass measured 18 x 18 x 8 cm. The mass was smooth, hard, painless and attached to the bone of the sternum. Resection of the mass was performed. Black and white transparency of the x-ray on this case is present in our Kodachrome file.

MICROSCOPIC: This is a difficult case. Some of the changes present are probably related to trauma, especially the subperiosteal new bone formation with vascularized septae with a large number of osteoclasts. Some areas even resemble aneurysmal bone cysts. The lesion itself is cartilaginous, however. The question is whether this lesion represents a well-differentiated chondrosarcoma. There are highly cellular areas present with bizarre nuclei. The location of the lesion, its size and its microscopic pattern make me believe that it should be classed as a chondrosarcoma. I hope the surgery performed was adequate.

DIAGNOSIS: Bone, sternum - Chondrosarcoma

Case #9 (62-741)

HISTORY: The patient is a 16 year old boy who complained of pain in the shoulder. There was noted to be a tumor mass in the upper one-third of the humerus. Complete resection of the mass was performed. Black and white transparency of the x-ray on this case is present in our file.

MICROSCOPIC: This is an osteochondroma. We rarely see a surgically-resected one in this young age group. The enchondral bone formation is more pronounced than we usually see in this lesion.

DIAGNOSIS: Bone, humerus - Osteochondroma

Case #10 (62-742)

HISTORY: The patient is a 12 year old male who was kicked in the right leg while playing soccer. Eight days later, dark blood drained spontaneously from the area of trauma. The area failed to heal and a 6 cm. ulcer remained. Three years later, he returned with a painful enlargement in the soft tissues at the site of the previous trauma. A black and white transparency of the x-ray is present in our Kodachrome file.

MICROSCOPIC: The bone is very dense and there is abscess formation. Plasma cells are very numerous. I can see no specific organisms. Naturally, the specificity of such a lesion must be established by appropriate cultures.

DIAGNOSIS: Bone, fibula - Osteomyelitis

Case #11 (62-743)

HISTORY: The patient is a 30 year old female with the chief complaint of pain in the upper one-third of the right leg. There was increased local temperature of the leg and the internal surface ^{was} is slightly red and tender. There ^{was} is a hard mass present, ~~which was~~ apparently attached to the right tibia. Biopsy was performed. A black and white transparency of the x-ray on this case is present in our Kodachrome file.

MICROSCOPIC: This is a fascinating case. The history and x-ray suggesting possible infection are often seen with reticulum cell sarcoma. We have also seen focal areas of regression. I believe radiation therapy is the therapy of choice in this case.

DIAGNOSIS: Bone, tibia - Reticulum cell sarcoma

Case #12 (62-744)

HISTORY: The patient is a 13 month old boy who had a laporatomy at three months of age (findings unstated). Ten months later, he developed exophthalmos on the right caused by a large orbital tumor mass. Biopsy was taken. A skeletal survey was also performed. A black and white transparency of the x-ray on this case is present in our Kodachrome file.

MICROSCOPIC: This is metastatic neuroblastoma. It would be difficult to be certain of the diagnosis without the history.

DIAGNOSIS: Bone, site ? - Neuroblastoma, metastatic

Wilms' tumor

Case #13 (62-745)

HISTORY: The patient is a 3 year old boy with a three month history of fever and marked weight loss. Physical examination revealed an undernourished, pale patient with prominent cervical adenopathy, hepatomegaly and splenomegaly. The patient was febrile and there was a marked anemia. Bone marrow biopsy revealed no abnormalities. A black and white transparency of the x-ray on this case is present in our Kodachrome file.

MICROSCOPIC: The bone shows many cement lines as a result of the destructive process. Within the bone, there are masses of histiocytes and eosinophils. Clinically, this is obviously a deseminated process. This case is not readily classified as either Letterer-Siwe disease or Hand-Schüller-Christian disease. Perhaps we should call it systemic malignant reticuloendotheliosis. I have seen one case of this that transformed into typical reticulum cell sarcoma.

DIAGNOSIS: Bone, site unstated - Systemic malignant reticuloendotheliosis

Case #14 (62-746)

HISTORY: The patient is a 22 year old male who has noted a slowly-growing mass in the upper third of the left leg for 2 years. The mass is attached to the tibia and has been painful for the last few months. It measures 7 cm. in diameter. Biopsy was performed. A black and white transparency of the x-ray is present in our Kodachrome file.

MICROSCOPIC: I believe the radiographic and microscopic picture fit well with parosteal osteosarcoma. It has been recommended that this slow-growing malignant tumor might be locally resected. Frequently, this is impossible because the tumor tends to encircle the bone. If local excision is attempted in such a case, the result is local recrudescence.

DIAGNOSIS: Bone, tibia - Parosteal osteosarcoma

Case #15 (62-747)

HISTORY: The patient is a 24 year old male who stated he has had a tumor of the distal one-third of the left leg for $1\frac{1}{2}$ years. The mass ^{was} ~~is~~ painful. Biopsy was performed. A black and white transparency of the x-ray on this case is present in our Kodachrome file.

MICROSCOPIC: Radiographically, this lesion appears to be benign. Microscopically, it is very difficult to interpret. We considered giant cell tumor, osteosarcoma, chondroblastoma and chondromyxoid fibroma. This lesion does not fit neatly into any of these categories. I feel this is not a giant cell tumor. It does not have the typical relation of giant cells to stroma that is seen in that lesion. One focal area is classical for aneurysmal bone cyst. The rest of the lesion, however, shows an intense stromal activity with rather numerous mitoses, prominent osteoid formation and giant cells often clustered around blood vessels. I would suspect there would be an excellent chance of this recurring if it is locally curetted. Dr. Spjut thinks this lesion is probably benign. I am not certain of this. Neither of us has seen a neoplasm like this before. I would be willing to have a surgeon remove it locally and fill the defect with bone chips. I say this because if it does locally recur, chances seem high it will recur without distant metastases. If it recurs, amputation can then be considered. Although most bone tumors will conform to a typical radiographic and microscopic pattern, a few will demonstrate the plasticity of bone and defy exact categorization. We have recently had several examples which seem to combine the pattern of chondroblastoma and chondromyxoid fibroma.

DIAGNOSIS: Bone, tibia - Neoplasm, unclassified

Astacio: Giant cell tumor -