CASE HISTORY
ORAL PATHOLOGY SEMINAR
# 59
JANUARY 12, 1978
O. P. S. 77-2420

CASE # 1 77-5548B

(Contributed by Dr. Hal Marshall, Menorah Hospital, Kansas City, Missouri)

This is an invasive lesion of the anterior mandibular gingiva in an elderly female. One reason for submitting this case is to learn the precise diagnosis used by participants to diagnose this case. Is it a "verrucous" carcinoma or a "papillary" epidermoid carcinoma?

CASE # 2 MLA-15356

(Contributed by Dr. Thomas Fritzlen, Kansas City, Mo.)

This is a 14 year-old boy with a rapidly growing, destructive tumor of the maxilla.

CASE # 3 77-1025

(Contributed by Dr. Charles Dunlap, D.D.S., and Dr. Bruce Barker, D.D.S., Oral Pathology Dept., Univ. of Mo., Kansas City, Mo., School of Dentistry 650 E. 25th St., Kansas City, Mo.)

This is a 23 year-old male who had a rapidly growing 2 X 2 cm mass protruding from the gingiva behind an upper left second molar tooth. A wisdom tooth and cyst had been removed from this site 16 months previously.

CASE # 4 77-2095

(Contributed by Dr. Carlos Perez-Mesa, Pathologist, Ellis Fischel State Cancer Hospital, Columbia, Missouri)

This is a 47 year old caucasian female, mentally retarded who had a parotid tumor discovered during a routine physical examination, on the left side consisting of a solid mass measuring 3 X 2.5 cm. No other abnormalities were found. Laboratory studies were non-contributing. A left lateral lobectomy including the mass were removed. The tissue represents a complete cross section of the lesion.

CASE # 5 77-2862

(Contributed by Dr. Fred P. Handler, M.D., Physicians' Laboratory, P.O. Box 605, Jefferson City, Mo. 65101)

This is a 36 year old healthy male caucasian was found to have a lesion deep to the left soft palate during routine oral examination prior to dental extractions, (10-18-77). The patient noted only a feeling of fullness in the area for perhaps two or three years. The lesion presented as a non-tender, 2.0 X 1.5 cm, ovoid, submucosal nodule. Posteriorly it was movable. Anteriorly, near the junction of the soft and hard palate, it was fixed.
CASE # 6 77-2183

This is a 7 year old child who had ataxia telangiectasia has had a very bad foul smell apparently coming from the nasal chamber for the past month. He has no drainage from the nose and he is unable to blow anything out of the nose. He has taken antibiotics which seems to help the condition to some extent, but after the drug is discontinued the odor returns. Examination in the office several days ago revealed the nose to be patent with a thick postnasal discharge in the nasopharynx and what may appear to be a foreign body in the nasopharynx. Sinus films have failed to reveal any evidence of sinus infection, however, he continues to have a foul odor from the nose.

CASE # 7 77-107

The specimen is an incisional biopsy from the left maxillary cuspids area of a 24 year old Caucasian female. The following information was provided. "2 cm. diameter mass over maxillary cuspids, mucosa peeled away easily. Mass forcefully stripped off of involved, underlying bone. Tissue white glistening and slightly gritty. Alveolus is dense and gritty. Also extends 1 1/2 X 1 cm palatal involvement all the way to the 2nd molar; not explored. The bicuspidas are loose and drifted out of occlusion. Duration: 2 months." (Radiographs are provided)

CASE # 8 77-207

The specimen is an excisional biopsy of a 2 X 2 mm bluish, raised lesion of the buccal surface of the edentulous mandible in the first and second molar area, of a 35 year old white female.

CASE # 9 31205-77

This is a 56 year year old caucasian female admitted to maxillofacial service because of tunefaction in the right maxilla of a three month duration. No other symptoms were offered by the patient. The only clinical finding was enlarged uterus. Roentgenograms show arthritic changes in cervical vertebrae. A tomogram of the brain was normal. Arteriography revealed hypervascularization around the right lobe of thyroid with increasing volume in the parathyroid area. There was also renal lithiasis. An excisional biopsy from the mandibular region is included. Some of you will receive tissue from the parathyroid gland. Lab studies are included, calcium 100 MG/L, and phosphorus 20 MG/L. There was hypercalcemia.

(Contributed by Dr. Ordie H. King, Jr., D.D.S., Ph.D., Southern Illinois Pathology Laboratory, Alton, Illinois.)

(Contributed by Dr. Ordie H. King, Jr., D.D.S., Ph.D., Southern Illinois Pathology Laboratory, Alton, Illinois.)

(Contributed by Dr. Yvon LeGal, Institut D'Anatomie, Pathologique, Faculte De Medecine, I Place De L' Hopital, Strasbourg (Bas-Rhin) France)
Dr. Carlos Perez-Mesa  
Department of Pathology  
Ellis Fischel State Cancer Hospital  
Columbia, MO 65201

Dear Carlos:

These are my diagnostic impressions on the cases of the 59th Oral Pathology Seminar:

Case 1. The differential diagnosis of this tumor, as well stated in the description, is between well differentiated epidermoid carcinoma and verrucous carcinoma. Although I have found this decision often to be difficult and even arbitrary, if I were to apply the rules of the game, I think I would have to call this tumor an epidermoid carcinoma because I found two foci in which the tumor cells have some degree of atypicality. As Dr. Ackerman used to say, "If a tumor looks like cancer then it is not verrucous cancer". This tumor looks microscopically like cancer, at least in those two foci and therefore I prefer a diagnosis of epidermoid carcinoma.

Case 2. This seems to be a pretty typical case of malignant lymphoma, which in Rappaport's classification would probably be called undifferentiated, Burkitt's type. It has a very prominent starry sky pattern and the neoplastic cells have a definite rim of cytoplasm, as well as a nucleus with several nuclei. It would be nice to have a methyl green-pyronin stain to confirm it.

Case 3. I found this the most difficult case of the Seminar. The only diagnosis that I can make for sure is that of malignant tumor, undifferentiated. The possibilities I considered were those of malignant melanoma, undifferentiated carcinoma, malignant hemangiopericytoma and even a poorly undifferentiated osteosarcoma, but I could not settle on any of them. I showed this slide to Dr. Robert Vickers, our Oral Pathologist, who was just as baffled by the case as we were and offered essentially the same differential diagnosis.

Case 4. This looks like a benign lymphoepithelial cyst, probably originated within an intraparotid lymph node. I presume its histogenesis is somehow related to that of the branchial cleft cyst. At least the microscopic appearance is indistinguishable from that entity.

Case 5. My diagnosis here is that of pleomorphic adenoma (benign mixed tumor). The tumor cells have a very strongly acidophilic cytoplasm, which I have found to be often the case in mixed tumors of the palate. I saw no evidence of malignancy.
Case 6. In this case of a highly undifferentiated malignant tumor, I favor a diagnosis of histiocytic malignant lymphoma, mainly because of the diffuse pattern of growth and the history of an immune deficiency. However, the specific diagnosis is somewhat difficult because of the scanty amount of the material and the extensive necrosis.

Case 7. I have the suspicion that this cartilaginous tumor is malignant. If every component of a tumor looked like this, I suppose one would have to call it chondrosarcoma. However, because of the age of the patient I suspect that this represents a osteosarcoma with a prominent chondroblastic component.

Case 8. The microscopic appearance of this lesion is very peculiar, but I suspect it is simply a radicular or residual cyst with a hyalinized formation being surrounded by a foreign body giant cell response.

Case 9. I would call this lesion a brown tumor of hyperparathyroidism because of the history and the abnormal parathyroid. Otherwise, I would not know how to differentiate it from a giant cell reparative granuloma.

It is nice to hear from you once in awhile, even if it is only connected to these Seminars. I hope that everything is going well with you. I have been invited by Fred Kraus to spend a few days at St. John's Mercy Hospital next April. I hope I will have a chance to see you there.

Best regards,

Juan Rosai, M.D.
Professor of Laboratory Medicine
and Pathology
Director of Anatomic Pathology
ORAL PATHOLOGY SEMINAR

"OFFICIAL DIAGNOSIS"

January 12, 1978

O.P.S. 77-2420

CASE # 1 (77-5548B) VERRUCOUS CARCINOMA

(Contributed by Dr. Hal Marshall, Menorah Hospital, Kansas City, Mo.)

The main purpose of the presentation of this case was to discuss the differential diagnosis between a "well differentiated papillary epidermoid carcinoma" and a "verrucous carcinoma or Ackerman's tumor." There were nineteen opinions in which the diagnoses were of a "verrucous carcinoma." Dr. Shafer, from Indiana University called it "verrucous carcinoma of Ackerman", as well as Dr. LeCal from Strasbourg, France. Dr. Waldron from Emery University stated: "I suspect this is a verrucous carcinoma. The biopsy is not overly "generous" and represents a problem we often face. If I had to sign this out on the basis of the rather scanty information provided, I would probably call it verrucous epithelial hyperplasia with a comment that it probably represents a verrucous carcinoma. In any event, I do not believe that this represents a papillary squamous cell carcinoma as the cellular atypia is minimal. Verrucous carcinoma can be very difficult to diagnose on the basis of a small biopsy without excellent clinical correlation and I've been "burned" too many times in the past in situations similar to this." Dr. Whitten from Southern Illinois University and Dr. Azar from Tampa also called it "verrucous carcinoma." Dr. Wesley, from Detroit University offered the diagnosis of "verrucous carcinoma." Dr. King from Southern Illinois University, as well as Dr.'s Fay, Sayers, Rodhouse, and Vincent, from Augusta, Ga., Eisenhower Medical Center called it "papillary epidermoid carcinoma." Dr. Al Abrams from Southern California University stated: "Although the history in this case indicates that a diagnosis of unequivocal carcinoma has been made, I feel that the strips of squamous epithelium alone are not sufficient for a definite diagnosis of malignancy. However, if this is indeed malignant, I would probably be one of those who would prefer the term "papillary squamous carcinoma." I believe there is too much cellular atypia to justify a verrucous carcinoma diagnosis." Dr. Batsakis from Michigan stated: "As Dr. Ackerman used to say "if a tumor looks like cancer, then it is not verrucous cancer." This tumor looks microscopically like cancer, at least in two foci, and therefore, I prefer the diagnosis of "epidermoid carcinoma." Dr. Sciubba from Stony Brook called it: "Verrucous dysplasia. No evidence of carcinoma in the slide." Dr. Ackerman's opinion was "not verrucous carcinoma or squamous cell carcinoma."
CASE # 2 (MLA-15356)  
MALIGNANT LYMPHOMA—BURKITT'S TYPE  
(Contributed by Dr. Thomas Fritzlen, Kansas City, Mo.)

Presently the patient is free of abnormalities, five months after completion of chemotherapy.

CASE # 3 (77-1025)  
MALIGNANT MELANOMA—PROBABLY METASTATIC  
(Contributed by Dr. Charles Dunlap, D.D.S., and Dr. Bruce Barker, D.D.S., Oral Pathology Dept., Univ. of Mo., Kansas City, Mo., School of Dentistry 650 E. 23rd St., Kansas City, Mo)

Amount the consultants, the differential diagnoses included "undifferentiated carcinoma, malignant melanoma, malignant hemangio pericytoma, malignant lymphoma, poorly differentiated plasmacytoma, glomus tumor, lefomyoblastoma, Ewing's sarcoma, Burkitt's lymphoma, sarcoma, rhabdomyosarcoma, metastatic adenocarcinoma." Dr.'s King, STU, Hor, W. Virginia, Azar, Tampa, Fla., Waldron, Ga., Batsakis, Michigan, LeCal, France, all suggested strongly of "melanoma." Electronmicroscopy studies showed the presence of pro-melanosomes. Subsequently the patient was transferred to a Cancer Hospital in the Southwest where he died with a disseminated tumor, which showed features of a malignant melanoma. Dr.'s Dunlap and Barker, believe that the lesion in the maxilla was not the primary neoplasm—probably another site.

CASE # 4 (77-2095)  
LYMPHOPITHELIAL CYST  
(Contributed by Dr. Carlos Perez-Mesa, Pathologist, Ellis Fischel State Cancer Hospital, Columbia, Mo.)

CASE # 5 (77-2862)  
PLEOMORPHIC ADENOMA  
(Contributed by Dr. Fred P. Handler, M.D., Physicians' Laboratory, P.O. Box 605, Jefferson City, Mo.)

Dr. Rosai from Minnesota stated: "My diagnosis here is that of a pleomorphic adenoma, (benign mixed tumor). The tumor cells have a very strongly acidophilic cytoplasm, which I have found to be often the case in mixed tumors of the palate." Dr. Rowe, from Michigan, called it: "pleomorphic adenoma." Dr. Ackerman from Stony Brook called it: "pleomorphic adenoma, myoepithelial variant." Dr. Scuibba, from Stony Brook stated: "myoepithelioma-some may feel this is a variant of pleomorphic variant while others place this into a monomorphic category." There were two consultants who classified the tumor as "mucoepidermoid carcinoma."
Case # 6

MALIGNANT LYMPHOMA—NOT FURTHER CLASSIFIED

(Contributed by Dr. Fred Handler, M.D., Physicians' Laboratory, P.O. Box 605, Jefferson City, Mo.)

The diagnosis in this case was handicapped because of the scanty material and necrosis. Some consultants were unable to identify any neoplasm and various diagnoses were offered including: "chronic inflammation, exuberant granulation tissue, nonspecific necrotizing granulomatous inflammation, inflammatory lesion, probably fungal." "Olfactory neuroblastoma" was offered by Dr. Whitten from SIU, Dr. Wesley, Detroit University, and Dr. Al Abrams of SCU. Dr. Batsakis from Michigan considered "undifferentiating neoplasm, probably non-keratinizing squamous cell carcinoma." Dr. Waldron, from Ga., called it: "malignant midline reticulosarcoma." Dr. Berthrong from Colorado Springs stated: "I suspect a malignant lymphoma arising in a patient who has a 10% chance of having a malignant lymphoma. Most of the material is necrotic or shows granulation tissue but I believe back of this is a lymphoreticular neoplasm."

PROGRESS REPORT:
As of March, 1978, the patient has received systemic chemotherapy and localized radiation treatment.

Case # 7

CHONDROSARCOMA

(Contributed by Dr. Ordie King, Jr., D.D.S., Ph.D. SIU, Alton, Ill.)

This was the unanimous diagnosis based on the biopsy material. Subsequently the patient was referred to the M.D. Anderson and Tumor Institute in Houston, Texas, where a left maxillectomy was performed on July 22, with insertion of an immediate prosthesis. "Examination of the tumor from the specimen (S-77-7920) yielded the diagnosis of Chondroblastic osteosarcoma. The tumor was considerably higher in grade than indicated by the biopsy, and because of the presence of spindle cells at the periphery cartilaginous nodules, nuclear anaplasia, and fairly frequent mitoses, it was felt that chondroblastic osteosarcoma was more likely the diagnosis. Chondrosarcoma, grade III, was also considered. The tumor extended close to the posterior margin of resection and there was some question as to whether the excision had been complete." Postoperatively the patient was started on combination chemotherapy with adriamycin, DTIC, receiving four courses of these drugs. In November sinus X-rays showed a soft tissue swelling in the operative area. Because of the concern to the posterior margin, an additional resection of the posterior, medial and upper walls of the maxilla was carried out on December 2, 1977. A study of this tissue showed only fibrosis and edema. No residual tumor was found. This follow-up information was courtesy of Dr. Steve Gallager.

Case # 8

LENTIL PULSE GRANULOMA

(Contributed by Dr. Ordie King, Jr., D.D.S., Ph.D., Southern Illinois Pathology Laboratory, Alton, Ill.)

This was one of the most fascinating cases of the seminar, where an enlightening
discussion was offered by Dr. King. This lesion has been recently described by Dr. Dunlap and Dr. Barker in "Oral Surgery, Oral Pathology, Oral Medicine", Volume 34, page 587, 1977 "Giant Cell Hyalin Angiopathy." Dr. King called this lesion "lentil pulse granuloma," and as demonstrated by Dr. King with numerous photographs suggest that most likely it represents foreign body reaction to a food product, in this case "lentil." Dr. Rowe from Michigan stated by phone: "I've seen numerous of these cases before, with the same histological features which "also believe represent foreign body granuloma to a food product." "Giant cell hyalin angiopathy was the diagnosis of Dr. Abrams, USC, Dr. Shafer, Indiana, Dr. Wesley, Detroit, and Dr. Waldron Ga. The majority of the observers call it "giant cell reaction or granuloma."

CASE # 9  (31205-77)
(2224-77)

This was the overwhelming diagnosis.

BROWN TUMOR OF HYPERPARATHYROID

(Contributed by Dr. Yvon LeGal, Institut D'Anatomie, Pathologique, Faculte De Medecine, I Place De L ' Hopital, Strasbourg (Bas-Rhin) France)