Ellis Fischel State Cancer Hospital
Columbia, Missouri

ORAL PATHOLOGY SEMINAR
No. 71, O.P.S. 81-110
March 13, 1981

IN MEMORIAM
PAUL O. BOYLE
(1911-1981)
PAUL O. BOYLE

This seminar is dedicated to the memory of Paul O. Boyle, Associate Professor of Surgery, University of Missouri Health Sciences Center. Paul was one of the initial and steady supporters through the years of the oral pathology seminars. We are sure that he would enjoy these cases. His friends are missing him.

CASE #1 (4788-80)
Contributed by V. Cardona Lopez, M.D., Tegucigalpa, Honduras, C.A.

The patient is a 39-year old Caucasian female who developed swelling of the right mandibular region with ulceration of the hard palate, purple 6 x 4 cm in greatest dimension. The lesion had been present for two months. There were other osteolthic disseminate throughout the cranium about 5 mm.

Representative roentgenograms are included.

CASE #2 (80-1149)
Contributed by Jose M. Hori, M.D., Davies Memorial Hospital, Elkins, West Virginia

The patient is a 47-year old female with a one-year history of progressive swelling and growing of a mass in the left nasolabial area. The specimen consists of a 1 cm reddish brown mass with central hemorrhage.

CASE #3 (23885/80)
Contributed by Yvon Legal, M.D., Strasbourg, France

This patient developed a cyst in the retro molar palatine area of one year duration.

Representative roentgenograms are included.

CASE #4 (S-81-177)
Contributed by C.H. Bourgeois, M.D., Columbia Regional Hospital, Columbia, Missouri

The patient is a 59-year old Caucasian male who developed a nodule located in the left submandibular gland, 2 cm in greatest dimension. Two years prior to admission, the patient was treated for an epidermoid carcinoma of the nose with radiotherapy (see photo). The material you are receiving is representative of the nodule from the sub-maxillary gland.

CASE #5 (81-002)
Contributed by C. Dunlap, D.D.S., University of Missouri-Kansas City, Kansas City, Missouri

This 18-year old female had a large radiolucent lesion associated with an unerupted tooth in the body of the left mandible. She had developed facial asymmetry and had occasional episodes of paresthesia. At surgery an encapsulated 3.5 cm solid tumor was encountered and removed along with the associated tooth.

CASE #6 (80-1494)
Contributed by C. Dunlap, D.D.S., University of Missouri-Kansas City, Kansas City, Missouri

This 43-year old male had a granular lesion of the palatal mucosa adjacent to an upper molar tooth. Duration was unknown. A biopsy was taken to rule out squamous carcinoma.
February 25, 1981

Dr. Carlos Perez-Mesa
Department of Pathology
Ellis Fischel State Cancer Hospital
Columbia, MO 65201

Dear Carlos:

Here are my diagnostic impressions for the Oral Pathology Seminar #71 to be held on March 13 of this year.

Case 1. I found this highly malignant small round cell tumor of very difficult interpretation. My first impression was that it represented a malignant lymphoma of some sort, but I just cannot put it into any category, and neither can Dr. Frizzera, our expert hematopathologist. Another possibility that I would consider is some very primitive neuroepithelial neoplasm. I would be very interested in what the other consultants think.

Case 2. A beautiful example of canalicular adenoma, which is perhaps the most common type of monomorphic adenoma of minor salivary gland origin. There was a large review of this lesion from Temple and Emory University reported in Oral Surg., 50:433, 1980.

Case 3. This is a carcinoma, and I suspect that it is of minor salivary gland origin. I would favor a diagnosis of high grade-mucoepidermoid carcinoma. There is a striking amount of hyaline material, which does not look like amyloid and which perhaps represents a reaction to the tumor.

Case 4. This is a carcinoma with areas of squamous differentiation, but I think that it is primary in this location rather than a metastasis from the previous tumor of the nose. Many of the cells have a clear cytoplasm. If this represents mucin, then this is another mucoepidermoid carcinoma. Another section, labeled 48, shows a benign lymphoepithelial cyst. I do not know whether this is from the same patient or not.

Case 5. I guess this is an adenomatoid odontogenic tumor with a paucity of duct-like structures.
Case 6. I think this is a granular cell tumor associated with pseudoepitheliomatous hyperplasia. The differential diagnosis includes verruciform xanthoma.

Best personal regards,

Juan Rosai, M.D.
Professor, Laboratory Medicine and Pathology
Director of Anatomic Pathology
CASE #1 (4788-80) METASTATIC MESENCHYMAL CHONDROSARCOMA
Contributed by V. Cardona Lopez, M.D., Tegucigalpa, Honduras, C.A.

This case generated numerous and different diagnostic impressions, being the most popular that it represented a malignant lymphoma, including lymphocytic type, histiocytic; lymphoma, a really bad one; follicular central cell lymphoma, large non-cleaved type.

Glass from Oklahoma commented "while we all agreed that this probably represented a lymphoma, there were some features that suggested plasma cell differentiation and myeloma was considered. Similarly, there appeared to be somewhat of a nesting pattern and we wonder whether this might represent an undifferentiated carcinoma of the breast, metastatic."

Rosai from Minnesota stated, "My first impression was that it represented a malignant lymphoma of some sort, but I just cannot put it to any category, and neither can Dr. Frizzera; another possibility I would consider is some very primitive neuroepithelial neoplasm."

Similar views were expressed by Abrams from U.S.C. "If forced into a corner I would prefer interpreting it as lymphoma, but the nuclei seem to have unusual morphology. I could not entirely exclude the possibilities of metastatic carcinoma and melanoma."

Weathers from Emory commented, "I have vacillated between metastatic carcinoma and an epithelioid lymphoma. My final conclusion is that this represents metastatic carcinoma."

From the National Institutes of Health, Drs. Costa and Martin commented, "We call it chloroma."

Rowe from Michigan stated, "Malignant lymphoma was the favorite diagnosis, but the organoid pattern seems curious."

Minority opinions included adenocarcinoma or even neural origin.
Batsakis from Maine called it "Neuroendocrine carcinoma (probably metastatic).

Berthrong from Colorado Springs made the following commentaries, "I believe this is a malignant tumor although it has an occasional endocrine-like appearance. The cells are remarkably uniform showing very prominent nucleoli and I suspect this is a malignant lymphoma. The type is difficult. We could call it a non-Burkitt small round cell malignant lymphoma. I have the feeling that it may be plasma cells in origin and would expect, if true, that the pyronine methyl green stain would show rims of positivity. The cytoplasm is so scanty that I can only rarely see the perinuclear halo of what I think may be plasma cells. My diagnosis is multiple myeloma."

Tarpley and Corio from Bethesda offered poorly differentiated malignant neoplasm including melanoma, carcinoma and reticuloendothelial lesion. They added, "X-rays and clinical might suggest a myeloma; however, we have not previously observed immature plasma cells with this consistent monotonous morphology."

Hori from West Virginia called it, "malignant lymphoma, histiocytic type, (cannot rule out Ewing's tumor.)"

LeGal from Strasbourg called it, "Ewings sarcoma."

Included with the material for the forthcoming seminar is a copy of a roentgenogram corresponding to a lesion that this patient has had in the right femur which was noted approximately five months before the present oral cavity was biopsied. Dr. Cardona Lopez, the contributor, obtained material from the femoral lesion and he interpreted it as "mesenchymal chondrosarcoma," exhibiting a microscopic pattern similar to the lesion in the oral cavity discussed in the seminar. The patient has apparently been lost to follow-up, if any of the consultants needs additional information concerning the nature of the primary lesion in the femur, please let me know your inquiries and I will be happy to communicate it to Cr. Cardona.

CASE #2 (80-1149) MONOMORPHIC CANALICULAR ADENOMA
Contributed by Jose M. Hori, M.D., Davies Memorial Hospital, Elkins, West Virginia

Monomorphic canalicular adenoma was the overwhelming diagnosis, although there were a few dissenters, probably because of its location within the oral cavity wasn't clearly stated. A recent and excellent review of the subject is in Oral Surgery, Volume 50, page 433, 1980 by Fantasia and Neville.
CASE #3 (23885/80) AMELOBLASTIC ADENOCANTOMA
Contributed by Yvon LeGal, M.D., Strasbourg, France

The diagnosis of adenocarcinoma was rather popular which was the opinion of Wesley from Detroit, Hori from West Virginia, Sprague from Nebraska, Shafer from Indiana, Aufdemorte and Cornyn from Texas and half of the staff from Michigan.

Batsakis from Maine called it, "Mucoepidermoid carcinoma of odontogenic origin."

Rosai from Minnesota stated, "This is a carcinoma and I suspect it is of minor salivary gland origin. I would favor the diagnosis of high grade mucoepidermoid carcinoma. There is a striking amount of hyaline material which does not look like amyloid and which perhaps represents a reaction to the tumor."

Abrams from U.S.C. called it, "Mucoepidermoid carcinoma." This was also the diagnosis of Dunlap and Barker from Kansas City, King from SIU, White from Kentucky, Azar from Tampa.

Lilly from Iowa called it, "Mucoepidermoid carcinoma, intermediate grade."

Weathers from Emory called it, "Adenocarcinoma, possibly X-pleomorphic adenoma."

Berthrong from Colorado Springs stated, "I believe that this is a mixed tumor but it is badly crushed and I am not certain. Indeed I suspect that perhaps in this mixed tumor a carcinoma may be developing. I can't even exclude a mucoepidermoid carcinoma. I will stick with a mixed tumor."

"With the exception of Dr. Huffaker from Texas, the rest of us called it Pindborg tumor."

Tarpley and Corio from NIH called it, "Malignant odontogenic neoplasm demonstrating induction-special stain to rule out amyloid, i.e., a malignant Pindborg."

Pindborg from Denmark called it, "Malignant tumor--metastasis from adenocarcinoma?"
CASE #4 (S-81-177) MALIGNANT WARTHIN'S TUMOR, MUCOEPIDERMOID TYPE
Contributed by C. H. BOURGEOIS, M.D., Columbia Regional Hospital,
Columbia, Missouri

There was a diversity of opinions concerning the histogenesis of this neoplasm, metastatic epidermoid carcinoma being the most popular one. During the presentation and discussion of the case, it was shown that the tumor area did not receive radiation therapy and that the lesion in the nose was fully controlled by radiotherapy treatment. The tissue available for the seminar originated from various areas from the same neoplasm. Part of it shows a rather atypical Warthin's tumor, while in others with the fibrous stroma and occasional germinal centers, it contains a tumor with features of mucoepidermoid carcinoma (mucin was positive). The patient was treated with a radical neck dissection, since all the nodes were negative for tumor. The "metastatic" nodule was the submaxillary gland. Several of the consultants made commentaries which will be selected at random.

Wesley from Detroit, "Metastatic carcinoma and papillary cystadenoma lymphomatosum."

Rosai from Minnesota, "This is a carcinoma with areas of squamous differentiation, but I think it is a primary in this location rather than a metastasis from the previous tumor of the nose. Many of the cells have a clear cytoplasm. If this represents mucin, then this is another mucoepidermoid carcinoma. Another section labelled B-4 shows a benign mucoepithelial cyst. I do not know whether this is from the same patient or not.

Six out of eleven from the staff of Fort Bliss, Texas called it, "malignant Warthin's tumor."

Abrams, "Specimen (A) I would interpret it to be squamous carcinoma. Specimen (B) seems to be a lymph node with multiple epithelial cysts. I see no evidence of malignancy in this specimen."

Weathers from Emory, "This is a very fascinating case which entails several possibilities. They could represent carcinoma especially from a Warthin's tumor, perhaps secondary to irradiation since there does appear to be some irradiation changes in the sections. The other entertaining possibility is that the lymphoid tissue of the Warthin's tumor contains a metastatic deposit from what I assume was squamous carcinoma of the skin or the nose.

Berthrong from Colorado Springs, "I believe this is a metastatic epidermoid carcinoma in a lymph node rather than a malignant tumor arising in the submaxillary gland. I suppose it would be fascinating to call it a malignant Warthin's tumor."
Hori from West Virginia offered three possibilities, "Walthin's tumor with malignant transformation; metastasis to Walthin's tumor; metastatic tumor (epidermoid carcinoma with cystic changes)."

Happonen from Finland, "(A) metastatic carcinoma in lymph node, (B) lymphoepithelial cyst."

White from Kentucky, "It is very tempting for us to call this malignant change in a benign cystic lymph node. We actually favor this diagnosis, but the percentages are not with us."

Azar from Tampa, "Invasive poorly differentiated squamous cell carcinoma and adenolymphoma."

Toto from Loyola called it, "(A) squamous carcinoma, metastatic (Metastatic adenoid-cystic carcinoma), (B) papillary cystadenoma lymphomatosum (malignant Walthin's tumor)."

Pindborg from Copenhagen, "(A) epidermoid carcinoma (B) Walthin's tumor."

Rowe from Michigan, "Opinions favor metastatic carcinoma, wondering if you were trying to sell this as malignant Walthin's tumor. There was some support for malignant Walthin's tumor."

CAS#5 (81-002) ODONTOGENIC ADENOMATOID TUMOR
Contributed By Drs. Dunlap and Barker, University of Missouri-Kansas City
School of Dentistry, Kansas City, Missouri

With a few dissenters, the overwhelming diagnosis was odontogenic adenomatoid tumor.

CAS#6 (80-1494) VERRUCIFORM XANTHOMA
Contributed by Drs. Dunlap and Barker, University of Missouri-Kansas City
School of Dentistry, Kansas City, Missouri

With the exception of a few who considered the lesion as verrucous hyperplasia, a very, very, very early verrucous carcinoma, or plain verrucous carcinoma, the overwhelming diagnosis was verruciform xanthoma. This lesion was first identified by Shafer from Indiana in 1971, and irreverently designated as histiocytosis Y; a recent review of this lesion is in Oral Surgery, 49: 429, 1980, authors: Neville and Weathers from Emory.