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COLP SEM CASES

ELLIS FISCHEL STATE CANCER CENTER
ORAL PATHOLOGY SEMINAR # 96
O.P.S. 87-1135
November 24, 1987

CASE HISTORIES

CASE 1: 87-9598 (3 slides and 1 gross photo)
Contributed by Drs. John Boxell and Ronald Oxenhandler, Memorial Hospital, Chattanooga, Tennessee.

75-year-old woman who noticed an enlarging mass involving her right cheek unassociated with pain or nerve paralysis. The mass was visible upon oral exam and seem to extend clinically from the region of the medial portion of the parotid intra-orally. The removal (in order to avoid the facial nerves) was performed intra-orally.

CASE 2 S-87-7835 (1 slide)
Contributed by Noel Weidner, M.D., Assistant Professor, Brigham and Women's Hospital, Boston Massachusetts.

73-year-old male has a polypoid nasal lesion, which also involves the ethmoid sinus and is associated with a "cloudy" x-ray. Nasal polypectomy was performed, from which representative slides were made.

CASE 3: 7293-87 (1 slide)
Contributed by James Sciubba, DMD, PhD, Long Island Jewish Medical Center, New Hyde Park, New York.

An 86-year-old male presented with a destructive lesion of the posterior portion of the right maxilla. On CT scan the mass appeared to arise from the right side of the hard palate and extended superiorly into the maxillary sinus and laterally into the nasal cavity while inferiorly it extended into the oral cavity. Posteriorly the mass extended into the pterygoid fossa. It was circular in shape and smooth in outline, producing expansion and thinning of the adjacent bony wall rather than actual infiltration and destruction. Radiographically the mass appeared to be heterogeneous with no evidence of calcification within. At surgery a partial maxillectomy was done with the slide being representative of a section through the surgical specimen.

CASE 4: 586-1085 (1 slide)
Contributed by Drs. Arnold and Oxenhandler, Memorial Hospital, Chattanooga, Tennessee.

This is a 66-year-old man who developed a cystic mass at the angle of the mandible between three and four months ago. There are no other associated symptoms and there is no clinical evidence of any disease elsewhere including kidney.

CASE 5: 87-1366 (1 slide)
Contributed by Drs. Charles Dunlap and Bruce Barker, University of Missouri-Kansas City, School of Dentistry, Kansas City, Missouri.

A 31-year-old black female with a 3 month history of a tumor in the left mandible. Radiograph showed a mixed radiolucent-radiodense, large and destructive tumor.

CASE 6: Unlabeled **(X-RAY ONLY, NO SLIDE)**
Contributed by Drs. Charles Dunlap and Bruce Barker, University of Missouri-Kansas City, School of Dentistry, Kansas City, Missouri.

A 28-year-old white female was seen at the University of Missouri Dental School with pain in the lower left 1st molar tooth which was badly decayed. A single dental x-ray showed bone sclerosis that could not be explained by the abscessed tooth. A panoramic film revealed large, dense areas throughout the mandible and smaller areas in the maxilla (no biopsy has been taken). She also had two supernumerary teeth.

CASE 7: 87-1109 C & D (2 slides)
Contributed by Carlos Perez-Mesa, M.D., Ellis Fischel State Cancer Center, Columbia, Missouri.

36-year-old white man noted a small nodule in soft palate of 6 years duration. He was seen by an ENT specialist who felt lesion was a cyst, probably benign. Subsequently because of pressure from relatives a biopsy was done which was interpreted elsewhere as adenocystic adenocarcinoma. The lesion was excised and a representative sample is included in your slide.

CASE 8: S81-5499 (1 slide)
Contributed by D. A. Anderson, M.D., St. John's Regional Health Center, Springfield, Missouri.

A 60-year-old caucasian female who in 1981 developed a knot beneath the right angle of the jaw of 2 years duration. No other complaints were given by the patient. The rest of the physical exam and laboratory studies were within normal limits. A biopsy of the "knot" was done.

CASE 9: S-42-77-87 (1 slide and 1 x-ray)
Contributed by Lawrence Clowry, M.D., Professor, Milwaukee County Medical Complex, Milwaukee, Wisconsin.

An 8-year-old boy who had routine extractions of partially impacted teeth, the upper left canine and bicuspid, in December, 1986. Nothing remarkable was noted by his dentist at that time. Over the next six months, the mother and child noted a slowly enlarging mass in the left maxillary area. On presentation, the oral surgeon described a "lumpy, firm, nontender, poorly circumscribed raised mass" in the left maxillary area. It was noted the left nares was raised by the mass. X-ray showed a "cotton wool" lesion of the left anterior maxilla. The lesion was incompletely excised. At surgery, it was noted to involve the anterior wall of the sinus and the nasal floor. A similar 1.0 x 1.0 cm. raised lesion was also seen on the palate and not removed at this time.

CASE 10: D-44-179 (1 slide)
Contributed by Prof. Dr. Dr. Med. Karl Donath, Institut Fur Pathologie, Der Universitat Hamburg, Martinistrasse, Hamburg.

A 73-year-old male was treated by a dentist for several days, because of a swelling in the molar region of the left maxilla. The swelling was clinically diagnosed as an abscess and also treated. After one week the patient was sent to a maxillofacial surgeon. He found a destructive process with an extension of 2 cm. by x-ray. The specimen was excised from the central part.

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"OFFICIAL DIAGNOSIS"

CASE 1: **MALIGNANT MONOMORPHIC ADENOMA (87-9598)**
Contributed by Drs. John Boxell and Ronald Oxenhandler, Memorial Hospital, Chattanooga, Tennessee.

Some consultants prefer basaloid carcinoma including Drs. **Santa Cruz** and **Kyriakos** from St. Louis, **Kahn** and **Sciubba** from Stony Brook, adding "some individuals may consider this as a solid variant of adenocystic carcinoma."
Tomich from Indiana commented, "This very interesting case has areas which are suggestive of a malignant dermal analogue tumor of salivary gland origin, a salivary duct carcinoma, or a "basaloid" or solid adenoid cystic carcinoma. It is a malignant lesion of salivary duct origin so I guess one can just pick the most appropriate nomenclature."
Gnepp from AFIP called it "high grade adenocarcinoma probably salivary duct carcinoma", which was also the diagnosis of **Lumerman, Freedman** and **Kerpel** from Flushing New York.
Donath from Hamburg, **White** from Kentucky, **Toto** from Loyola and **Abrams** from USC preferred malignant dermal analogue tumor who commented, "The cells appear to be a little too pleomorphic for solid adenoid cystic carcinoma."
El-Mofty from Washington University, **Waldron** from Emory and **Sprague** from Nebraska liked to consider a solid type of adenoid cystic carcinoma.

Other diagnoses included mucoepidermoid carcinoma, myoepithelioma, malignant oncocytoma, lobular carcinoma.

The case contributor stated Drs. Hartmann formerly from Vanderbilt and Batsakis from M.D. Anderson agree with the diagnosis as malignant monomorphic adenoma. Dr. Batsakis apparently is in the process of putting together several tumors of this type for publication.

CASE 2: **HEMANGIOPERICYTOMA-LIKE INTRANASAL TUMOR (S87-7835)**
Contributed by Noel Weidner, M.D., Assistant Professor, Brigham and Women's Hospital, Boston, Massachusetts.

This was also the diagnosis of many others including **Gnepp** from the AFIP, **Kyriakos** and **Santa Cruz** from St. Louis, **Tomich** from Indiana, **Lumerman, Freedman** and **Kerpel** from Flushing, **Donath** from Hamburg and **Xi** from Sun Yat-Sen University.

Other diagnoses included nasal meningioma, neuroepithelioma, malignant schwannoma with epithelioid features, myosarcoma. Somebody offered the diagnosis as nasal polyp, not further classified.

References:
American Journal of Clinical Pathology 66: 672, 1976.
Laryngoscope 88:460, 1978.

CASE 3: **ATYPICAL EPITHELIAL MYOEPITHELIAL CARCINOMA OF INTERCALATED DUCT ORIGIN (7293-87)**
Contributed by James Sciubba, DMD, PhD, Long Island Jewish Medical Center, New Hyde Park, New York.

Among other diagnoses, **El-Mofty** from St. Louis, "Difficult case, pleomorphic adenoma vs. low grade adenocarcinoma. I prefer pleomorphic adenoma."
Gnepp from the AFIP, "monomorphic adenoma, probably salivary duct carcinoma."
Eusebi from Bologna, "pleomorphic carcinoma."
Toto from Loyola, "cellular mixed tumor of minor salivary gland."
Abrams from USC, "carcinoma ex mixed tumor."
Drs. **Simon, Gallardo, Videla** and **Oliva** from San Juan, Argentina considered monomorphic adenoma, partially membranous, partially oncocytoid. Is not infiltrative and did not invade nerves. Good margins."
Weathers from Emory, "carcinoma ex-pleomorphic adenoma."
Hansen from San Francisco, "In spite of its extension we believe this is most likely a spherical, expansile adenoma, probably arising in accessory mucous glands of the maxillary sinus."
Oxenhandler from Chattanooga, "adenocarcinoma with large myoepithelial components."

CASE 4: **MULTI NODULAR ONCOCYTOSIS (S86-1085)**
Contributed by Drs. Arnold and Oxenhandler, Memorial Hospital, Chattanooga, Tennessee.

A few opinions at random:

Sciubba and **Kahn** from Stony Brook, "This represents oncocytosis which in all likelihood should not prove to be of any long term difficulty to this patient."
Lumerman, Freedman and **Kerpel** commented, "Cyst of parotid with multifocal oncocytosis and clear cells. Are the clear cells really oncocytes that have undergone "degranulation"?"
Weathers from Emory, "oncocytosis with cystic degeneration."
Hansen from San Francisco, "cyst, consistent with multifocal oncocytosis."
Weidner from Boston, "Although I cannot be sure from my slide, I am suspicious of cystic acinic-cell carcinoma."
This was also the diagnosis of **Hartmann** formerly of Vanderbilt.
Cardona Lopez from Honduras offered, "oxyphilic parotid cyst."
Sprague from Nebraska commented, "Foul play. Not enough material for diagnosis. Cyst?"

CASE 5: **OSTEOSARCOMA (87-1366)**
Contributed by Drs. Charles Dunlap and Bruce Barker, University of Missouri-Kansas City School of Dentistry, Kansas City, Missouri.

This was the overwhelming opinion of the consultants. Only two dissenting views including "aneurysmatic bone cyst" and "ossifying fibroma to be followed because numerous mitoses."

CASE 6: **GARDNER'S SYNDROME (UNLABELED X-RAY ONLY)**
Contributed by Drs. Charles Dunlap and Bruce Barker, University of Missouri-Kansas City School of Dentistry, Kansas City, Missouri.

The lack of microscopic slides provoked the following commentary: "Trouble being a Pathologist, let alone a Radiologist.", while somebody offered "slide missing."

A great majority of the consultants offered "florid osseous dysplasia ala Abrams" which was also the diagnosis of Dr. **Abrams** from USC who commented, "I think this is florid osseous dysplasia but could not completely rule out Gardner's syndrome.".
Tomich from Indiana, "With the supernumerary teeth and multiple opacities, this must be Gardner's syndrome."
White from Kentucky, "Florid osseous dysplasia. R/O Gardner's syndrome."
Lumerman, Freedman and **Kerpel,** "The combination of radiopacities (osteomas?) and supernumerary teeth suggest the possibility of Gardner's syndrome. Patient should be examined for skin lesions and if present, intestinal polyposis."

Included is a clarifying follow-up and commentary that Dr. Dunlap sent. (attachment)

CASE 7: **LOW-GRADE POLYMORPHOUS ADENOCARCINOMA (87-1109)**
Contributed by Carlos Perez-Mesa, M.D., Ellis Fischel Cancer Center, Columbia, Missouri.

The great majority of the consultants agreed with the diagnosis only with minor preferences in nomenclature which include low-grade adenocarcinoma, lobular carcinoma and terminal duct carcinoma. A few called it trabecular adenoma, monomorphic adenoma and adenoid cystic carcinoma.

CASE 8: **MALIGNANT LYMPHOMA PROBABLY ARISING FROM A BENIGN LYMPHOEPITHELIAL LESION (S81-5499)**
Contributed by D. A. Anderson, M.D., St. John's Regional Health Center, Springfield, Missouri.

The majority of the consultants voted for such diagnosis.

Weidner from Boston, "I'm probably missing something, but this looks like partial major salivary gland involvement by a benign lymphoepithelial lesion."
Abrams from USC, "Lymphoepithelial lesion, but suspicious."
Hammond, Finkelstein, Vincent Benjamin, Deahl and **Watson** offered, "Some supported mixed lymphocytic-histiocytic lymphoma, others benign lymphoepithelial lesion. We were unable to reach a consensus."
Kyriakos from St. Louis prefered lymphoepithelial lesion, benign. **Santa Cruz** from St. Louis also shared similar opinion.
Hansen from San Francisco commented, "If the submaxillary alone is involved it is probably best described as a benign lymphoepithelial lesion or giant follicular hyperplasia of salivary gland. In any event we favor a reactive lymphoid hyperplasia."

Follow-up:

The patient was treated with R.T. in 1981, presently without any related abnormalities. However, in 1987 she developed a poorly differentiated adenocarcinoma of the lung, considered inoperable. She is receiving chemotherapy.

CASE 9: **OSTEOMA (S-42-77-87)**
Contributed by Lawrence Clowry, M.D., Professor, Acting Chairman, Department of Pathology, Medical College of Wisconsin, Milwaukee, Wisconsin.

Many agree with the diagnosis including **Hammond, Finkelstein, Vincent, Benjamin, Deahl** and **Watson** from Iowa, **Eusebi** from Bologna, **Xi** from Sun Yat-Sen University, **Abrams** from USC, and **Weidner** from Boston.

A few dissenting opinions included hyperphosphatasia, osteocartilaginous dysplasia, fibrous dysplasia, hemangioma.

REFERENCE: Journal of Oral Surgery 37:113, 1979. Liston, Barker and Cocayne.

CASE 10: **METASTASIS OF A PROSTATE CARCINOMA (D-44-179)**
Contributed by Prof. Dr. Dr. Med. Karl Donath, Institut Fur Pathologie, Der Universitat Hamburg, Martinistrasse, Hamburg.

Many considered the possibility of metastasis.

Eusebi from Bologna, "metastatic malignant melanoma or renal cell carcinoma."
White from Kentucky, "Primary anaplastic carcinoma. Rule out metastatic carcinoma or melanoma."
LeGal from Strasbourg, "This is a malignant process. There is exocytosis by malignant cells in the gingival lining. There are two cancers having this property: lymphomas and malignant melanoma. I choose the second: "amelanotic variety". But the clear cells are disturbing."
Weathers from Emory, "Metastatic carcinoma, although a lymphoepithelial carcinoma cannot be totally excluded."
Abrams from USC, "Undifferentiated malignancy, probably metastatic. It could be a melanoma, but I would check out pancreas, lung and liver."
Cardona Lopez from Honduras, "Metastatic carcinoma, clear cells ? kidney."
The opinions from the Department of Pathology in San Juan, Argentina were divided. Some favoring metastasis while others an inflammatory non-neoplastic process.

Patient follow-up:

"The patient was hospitalized 6 years ago because of a prostate carcinoma. He was operated and treated by estrogens. After the treatment by the maxillofacial surgeon and diagnosis of a metastasis no further metastasis could be found in other regions by x-ray."

You requested remarks regarding the patient with Gardner's syndrome. She presented to the dental school as a 28-year-old female with no extraordinary medical history with exception of the fact that at ages 10 and 14 she had had two operations on her lower jaw (bilateral) for some "bone problem". She had severe decay in the lower left first molar and a single intraoral film showed some bone sclerosis that could not be accounted for by the dental infection. This led us to take a larger panoramic x-ray which we submitted for the conference. As you recall, this showed multiple sclerotic areas throughout the mandible and a few in the maxilla. She also had two supernumerary teeth, one in the maxilla and one in the mandible. (Supernumerary teeth have been reported in Gardner's syndrome).

On questioning, we learned that her mother had died at age 33 of colon cancer and furthermore, her 25-year-old sister also has a history of some similar jaw problems.

Because we suspected Gardner's syndrome, we asked for a colonoscopic examination. Numerous polyps were encountered throughout the large bowel, with the largest number in the ascending colon. The largest was estimated to be about 5 cm in diameter. The gastroenterologist estimated that there were more than 50 polyps. According to the literature, experience has shown that when that many can be directly visualized, there are actually many small subclinical polyps that cannot be appreciated until the colon is resected and examined grossly.

We feel that the family history of early death from colon cancer, the existence of multiple polyps in the colon in this 28-year-old lady coupled with the osteomantosis and supernumerary teeth are almost irrefutable evidence of the existence of Gardner's syndrome. This syndrome is inherited as an autosomal dominant.

She was scheduled to have a colon resection on November 2, 1987 at St. Luke's Hospital, but she did not keep the appointment. I have not been able to reach her by phone.

REFERENCE: American Journal of Surgical Pathology, Volume 10:871, 1986. Hereditary Gastrointestinal Polyposis Syndrome Haggitt, R.C. and Reid, B.J.