CASE #1 (S86-7100)
Contributed by Ronald W. Oxenhandler, M.D., Memorial Hospital, Chattanooga, Tennessee.

89 year old with a two-year history of obstructive symptoms with intermittent bleeding. The left nasal mass has enlarged recently. A CT scan performed 7/1/86 shows a mass localized to the left nares. The doctor is unaware of any other significant history.

CASE #2 (DC86-434) (slide and x-ray)
Contributed by Charles A. Waldron, D.D.S., Washington University School of Dental Medicine, St. Louis, Missouri.

A black man, age 51, presented with a moderately painful right mandibular swelling of some months duration. Clinical examination showed a generalized enlargement of the right mandible with clinical evidence of a pathologic fracture in the premolar area. The covering gingiva and alveolar mucosa were clinically normal and there was no evidence of mucosal ulceration or abnormal mass anywhere in the soft tissues of the mouth. Radiographs showed that the mandible was almost totally destroyed by an extensive lytic process extending from the symphysis to the ascending ramus. After biopsy a mandibular resection was performed. An x-ray of the surgical specimen is enclosed. The slide represents a cross section through the mandible in the canine area.

CASE #3 (4539) (slide and x-ray)
Contributed by Y. LeGal, M.D., Institut D'Anatomie Pathologique, Strasbourg.

LU is a 16 year old male. An osteolytic lesion was discovered in the maxilla in 1982. Copy of the roentgenogram from January 1985 is included.

CASE #4 (1506)
Contributed by T.A. Lovinggood, M.D., Southeast Missouri Hospital, Cape Girardeau, Missouri.

The patient is a 72 year old white man who complained of a gradually increasing swelling of the right facial area opposite the parotid gland. The mass occurred over a 2 month period. At surgical exploration the right deep lobe of the parotid was found to contain a tumor mass.
CASE HISTORIES continued

CASE #5 (23063) (slide and 3 EM photos)
Contributed by Y. LeGal, M.D., Institut D'Anatomie Pathologique, Strasbourg.

CS was born in 1959 and developed "nasal polyps of the left side" at the end of 1980. Subsequently, the patient had several recurrences: in 1982 (middle turbinaire), in 1984 (left intersinusos-nasal wall), in 1985 at the previous place and finally again in 1986. Despite these numerous recurrences there had not been bone destruction. The histology of the tumor remains unchanged. The material you are receiving represents the original biopsy performed in 1980. Included also are electro micrographs.

CASE #6 (S86-2389)
Contributed by J. B. Andelin, M.D., Mercy Hospital of Williston, Williston, North Dakota.

TD is a 34 year old caucasian male, user of smokeless tobacco who developed a 2 cm nodule in the soft palate, mobile, nonfixed which was almost completely excised during biopsy. According to the patient, the lesion has been there almost 2 years.

CASE #7 (T86-4227)
Contributed by Charles Dunlap, D.D.S. and Bruce Barker, D.D.S., Department of Oral Pathology, University of Missouri-Kansas City, School of Dentistry, Kansas City, Missouri.

A 61 year old male with a 4.5 cm tumor in the soft palate.

CASE #8 (86-1608 and 86-1623) (2 slides)
Contributed by Charles Dunlap, D.D.S. and Bruce Barker, D.D.S., Department of Oral Pathology, University of Missouri-Kansas City, School of Dentistry, Kansas City, Missouri.

A 75 year old male had diffuse leukoplakia of the palate. One site had an approximately 1.2 cm exophytic lesion (86-1608) and two other sites had flattened, papillary lesions; both were removed and 86-1623 is representative.

CASE #9 (86-1466) (clinical photo only)
Contributed by Charles Dunlap, D.D.S. and Bruce Barker, D.D.S., Department of Oral Pathology, University of Missouri-Kansas City, School of Dentistry, Kansas City, Missouri.

This 75 year old had an ulcerative lesion of long duration on the buccal gingiva as shown. There were no other oral lesions and the medical history was unremarkable.

CASE #10 (S1928)
Contributed by Miguel A. Simon, M.D., Professor of Pathology, San Juan, Argentina.

MA is a 30 year old white female who developed a mass asymptomatic located within the parotid gland area. This patient had a pigmented lesion removed at an undetermined past, however, the histological nature was not known.
Dear Carlos:

These are my impressions on the cases that I received from you from the Oral Pathology Seminar #93:

Case 1 - This is a malignant vascular tumor, and my differential diagnosis is between malignant hemangiopericytoma and malignant hemangioendothelioma. I slightly favor the former on the basis of the architecture, but I would like to see reticulin stains and immunoperoxidase before deciding between the two. One should also do stains for keratin and epithelial membrane antigen to rule out the outside possibility of an angiosarcomatoid carcinoma, either primary or metastatic.

Case 2 - I guess this is a very well differentiated squamous cell carcinoma, predominantly cystic. It sounds from the history like this may be an example of so-called intraosseous carcinoma, perhaps arising from an odontogenic cyst. There is also a very extensive osteoblastic reaction around the tooth.

Case 3 - This looks like a very organoid odontogenic lesion. I suppose it corresponds to a complex or compound odontoma, but I would defer to the oral pathologist regarding the exact terminology.

Case 4 - It looks like a carcinosarcoma of salivary gland origin. Alternatively, one may use the terminology of sarcomatoid or sarcoma-like carcinoma if one were to interpret the entire neoplasm as of epithelial derivation.

Case 5 - The three possibilities I considered in this case were those of chondroid chordoma, low-grade chondrosarcoma, and malignant mixed tumor with a predominantly cartilaginous component. I favor the former, but I would need a battery of immunocytotoxic stains before making a definitive diagnosis.
Case 6 - This is a carcinoma of minor salivary gland derivation, and the architectural features suggest that it belongs to the general category of adenoid cystic carcinoma. There is a striking hyperplasia of the overlying squamous mucosa.

Case 7 - The only name that I can think of for this lesion is that of osteoma.

Case 8 - I would diagnose this lesion as verrucous keratosis, although I cannot rule out the possibility of it being a early form of verrucous carcinoma.

Case 10 - This looks consistent with a malignant melanoma that has metastasized to an intraparotid lymph node.

I have been in communication lately with your friend Ronald Oxenhandler, who tells me that he misses a lot your company and the atmosphere of Columbia, Missouri.

Best personal regards,

Juan Rosai, M.D.
Professor of Pathology
Director of Anatomic Pathology
"OFFICIAL DIAGNOSIS"

The proceedings of this seminar were conducted in the Lodge of the Four Seasons Resort, Lake Ozarks, Missouri.

CASE 1: ANGIOSARCOMA (S86-7100)
Contributed by Ronald W. Oxenhandler, M.D., Memorial Hospital, Chattanooga, Tennessee.

The majority of the consultants favored the diagnosis of angiosarcoma. A few comments at random:

Rosai from Yale, "This is a malignant vascular tumor, and my differential diagnosis is between malignant hemangiopericytoma and malignant hemangioendothelioma. I slightly favor the former on the basis of the architecture, but I would like to see reticulin stains and immunoperoxidase before deciding between the two. One should also do stains for keratin and epithelial membrane antigen to rule out the outside possibility of an angiosarcomatoid carcinoma, either primary or metastatic."

Meyer and Associates from St. Luke's Hospital, St. Louis, "Angiosarcoma. We had some thoughts about pyogenic granuloma, but concluded that the vascular pattern was too atypical and the sarcomatoid stroma is like that of angiosarcomas of the head and face in older people."

Glass, Young, and Rohrer from Oklahoma commented, "We feel this is a malignant vascular lesion and would consider angiosarcoma and possibly Kaposi's sarcoma."

Sprague and Associates from Nebraska, "Generically, this is quite acceptable for a form of angiosarcoma. However, we believe it is more acceptable specifically as a a Kaposi's sarcoma."

Azzopardi from the University of London, "? Hamangiopericytoma-like tumor of nose but cytologically "worse" than usual tumor, with large vesicular nuclei. Angiomatous lesions entered my differential from pericytomatosus ones, as some tumor cells appeared to line vascular spaces, but mostly they seemed to be around the vessels. Commoner lesions should be excluded by appropriate stains, and reticulin might emphasize the pericytomatos pattern. Factor VIII might also be helpful, if only as a negative image."

Toto and Associates from Loyola at Chicago interpreted the lesion as malignant hemangiopericytoma.

Simon from Argentina interpreted as a Kaposi's sarcoma.

Abrams from USC, "The cellular atypia seems too severe to consider this to be benign. Therefore, angiosarcoma or Kaposi's sarcoma would be likely."

Cardona Lopez from Honduras and Eusebi from Bologna interpreted the lesion as angiosarcoma.
Weidner from Wake Forest, Barker and Dunlap from the University of Missouri-Kansas City preferred pyogenic granuloma. Rowe and Stewart from Michigan also pyogenic granuloma vs. sarcoma. LeGal from Strasbourg interpreted the lesion as "hemangioendothelioma, presumed benign." Donath from Hamburg preferred angiogranuloma-DD haemangioendothelioma.

CASE 2: PRIMARY INTRA-OSSEOUS SQUAMOUS CELL CARCINOMA - PROBABLY ORIGINATING IN AN ODONTOGENIC CYST (DC86-434)
Contributed by Charles A. Waldron, D.D.S., Washington University School of Dental Medicine, St. Louis, Missouri.

A few commentaries at random:
Lumerman, Freedman, and Kerpel from Flushing New York, "squamous cell carcinoma arising in a cyst." Krutchkoff and Eisenberg from the University of Connecticut, "A central and well-differentiated squamous cell carcinoma, apparently not arising from surface epithelium. We question the origin of this and throw out the possibility of the so-called primary intra-alveolar carcinoma." Rosai from Yale, "I guess this is a very-well differentiated squamous cell carcinoma, predominantly cystic. It sounds from the history like this may be an example of so-called intraosseous carcinoma, perhaps arising from an odontogenic cyst. There is also a very extensive osteoblastic reaction around the tooth." Glass, Young, and Rohrer from Oklahoma, "We think this is a well differentiated squamous cell carcinoma which very likely might have arisen from the lining of the odontogenic cyst which still seems to be present on the radiograph." Azzopardi from the University of London, "Burrowing squamous carcinoma, apparently as a primary intra-alveolar lesion. Possibly of odontogenic origin or, alternatively, from sequestered squamous epithelium." Sprague and Associates from Nebraska, "We are assured from the clinical history that there is no communication with this proliferating epithelium and the surface. With that in mind, we must strongly support primary interosseous carcinoma, not otherwise subclassified. We see no histopathologic evidence to support origin from odontogenic apparatus." Hammond, Vincent, and Watson from Iowa, "Well differentiated squamous cell carcinoma, apparently primary in mandible." Tarpley and Corio from Georgetown University, "Squamous cell carcinoma with verrucous pattern with the carcinoma probably arising in a cyst." Azar from Tampa, "Keratinizing squamous cell carcinoma, presumably primary intra-osseous." Sciuamba from SUNY at Stony Brook preferred primary intra-alveolar carcinoma. Abrams from USC offered, "The histopathology is squamous carcinoma. In view of the history provided, it might be a primary intra-osseous squamous carcinoma."
CASE 3: **COMPOUND ODONTOMA (4539)**

Contributed by Yvon LeGal, M.D., Institut D'Anatomie Pathologique, Strasbourg.

White from Kentucky commented, " Developing odontoma with prominent ameloblastic component which is associated with newly-formed dental hard tissue. Some may wish to call this the old ameloblastic odontoma, but we believe the epithelium is actively participating in matrix production and not neoplastic."

Lumerman, Freedman, and Kerpel made the following commentary, "Although there is a great deal of "Enamel organ" type epithelium, we believe that most if not all of it is involved in tooth production. Therefore, although some might consider the diagnosis of odontoameloblastoma, or ameloblastic fibro-odontoma, we would simply call this a complex odontoma."

Krutchkoff and Eisenberg, "Odontoma—plain and simple. This apparently matured over the years from a lytic to an opaque process."

Tomicz from Indiana also called it complex odontoma.

Azzopardi from London, "? Complex odontome, with ameloblastic epithelium one end, and tooth-bud-like malformations other end. "Osteolytic" lesion puzzled me. Is it not "sclerotic" as seen on the slide?"

Toto from Loyola University at Chicago, "complex odontoma, immature."

Kyriakos from Washington University and Gnepp from St. Louis University, St. Louis called it odontoma.

Kahn and Scuibba from Stony Brook commented complex odontoma, adding, "The enclosed panoramic radiograph suggests a pattern unlike that for an odontoma. The single slide examined would suggest a more aggressive process than an odontoma, raising the possibility of this representing an ameloblastic odontoma."

Abrams from USC, "This is mostly complex odontoma. However, there is a small fragment of "soft tumor" present along one side, so ameloblastic fibro-odontoma would be an acceptable diagnosis."

Weathers from Emory, "Actively growing odontoma (complex)."

A few interpreted the lesion as malignant ameloblastoma.

CASE 4: **CARCINOSARCOMA (1506)**

Contributed by T.A. Lovinggood, M.D., Southeast Missouri Hospital, Cape Girardeau, Missouri.

All the consultants agreed in the malignant nature of the lesion, however, some differences concerning histogenesis. A few random examples:

Lumerman, Freedman, and Kerpel from Flushing, New York, "This is a peculiar tumor demonstrating definite adenocarcinoma set in a spindle-cell sarcomatous stroma. The stroma resembles fibrosarcoma but we feel that there may be some evidence of osteoid formation. We're not sure if subclassifying the sarcomatous component is relevant and are inclined to call this tumor a carcinosarcoma, probably of parotid gland origin."
Rosai from Yale, "It looks like a carcinosarcoma of salivary gland origin. Alternatively, one may use the terminology of sarcomatoid or sarcoma-like carcinoma if one were to interpret the entire neoplasm as of epithelial derivation."

LeGal from Strasbourg made the following commentary, "Carcinosarcoma or malignant mixed tumor. But from what origin? How is the PAP for S 100 protein? I am dreaming of a peripheral malignant nervous tumor induced by a carcinoma of salivary gland through NGF."

Tomich and Associates from Indiana University, "This is a remarkable case. One component appears to be similar to salivary duct carcinoma as described by Fayemi and Toker. The stromal component appears to be neoplastic as well. Perhaps this is a carcinosarcoma. Another possibility is a malignant schwannoma with glandular differentiation."

Sprague and Associates from Nebraska, "Since we feel comfortable that both the stroma and the epithelium are malignant, we must support a diagnosis of carcinosarcoma. The best bet would be that it is a metastasis to this region. Because of the stroma, we cannot support a diagnosis of carcinoma ex pleomorphic adenoma."

Hammond, Vincent and Watson from Iowa offered, "malignant schwannoma with glandular differentiation."

Tarpley and Corio from Georgetown offered the following comment, "Carcino-sarcoma in the broad sense but with the neural and rhabdomyoblast elements present-the possibility of a malignant triton tumor must be considered."

Kyrliakos from Washington University offered the possibility of "Synovial sarcoma-stroma is malignant with fibrosarcomatous areas (Cancer 50:269, 1982)."

Simon from San Juan, Argentina, "I vote for carcinosarcoma since both tumor components are neoplastic."

Azar from Tampa, "Adenocarcinoma with sarcomatous stroma. This is probably a malignant pleomorphic adenoma because of a residual focus of pleomorphic adenoma."

Donath from Hamburg, "An unusual case, which I have never seen. I think it is an adenocarcinoma with a sarcoïd-like stroma reaction, I would not call it carcinosarcoma or malignant pleomorphic adenoma."

Weidner from Wake Forest and Eusebi from Bologna call it salivary duct carcinoma. Weidner stated, "The carcinomatous component of this tumor reminds me of so-called "salivary-duct carcinoma" like that described by Garland et al. (Am J Clin Pathol 81:436-441, 1984). The surrounding stroma is very atypical with increased mitotic activity. Is it pseudosarcomatous desmoplastic response, or is it true sarcoma? If the latter is true, then this lesion becomes a carcinosarcoma. I also considered true malignant mixed tumor. In either event, this tumor is high grade."

Follow-up: There was no evidence of recurrence during the visit of the patient to the clinic in January, 1987.
CASE 5: CHORDOMA (23063)
Contributed by Yvon LeGal, M.D., Institut D'Anatomie Pathologique, Strasbourg.

The contributor, Dr. LeGal, offered the following, "I don't know and hope to know the final answer."

Waldron and El-Mofty from Washington University, St. Louis called it chordoma.
Lumerman, Freedman and Kerpel sent the following commentary, "The microscopic appearance of this lesion and the EM photos suggest a diagnosis of chordoma although the lack of bone destruction and the apparent origin of the lesion from the lateral nasal wall are perplexing. Although we favor the diagnosis of chordoma, we suppose one must also consider chordoid sarcoma."
Rosai from Yale, "The three possibilities I considered in this case were those of chondroid chordoma, low-grade chondrosarcoma, and malignant mixed tumor with a predominantly cartilaginous component. I favor the former, but I would need a battery of immunocytochemical stains before making a definitive diagnosis."
Meyer from St. Luke's Hospital in St. Louis, "This was a puzzler. We all considered chordoma but most of us dismissed it because of the epithelial growth pattern focally and the electron micrographs. Chondrosarcoma was the first choice of some; others including myself favor mixed tumor (pleomorphic adenoma)."
Hori from Elkins, West Virginia favored chondroid chordoma.
Tomich from Indiana, "Chondroid chordoma is the best we could do on this case."
Kyriakos from Washington University, St. Louis, "Chordoma. Unusual site but chordomas not connected to clivus are reported. See Arch Laryngol 78:168, 1963; Laryngoscope 90:612, 1980; and Laryngoscope 94:1063, 1984."
Simon, Staff and Residents from San Juan, Argentina by unanimity called it chordoma.
Sprague from Nebraska, Azzopardi from the University of London, Hammond and Associates from Iowa, Tarpley and Corio from Georgetown, Hansen from San Francisco, Sciubba and Kahn from Stony Brook, Abrams from USC, Donath from Hamburg and Eusebi from Bologna also prefer chordoma.

Other dissenting opinions were also rendered. A few at random:
Krutchkoff and Associates from Connecticut, "Benign mucoid mucosal polyp. The enclosed photocopies of electron micrographs did not have sufficient detail to be useful to us."
Glass, Young, and Rohrer from Oklahoma, "We feel this represents a mucous extravasation phenomenon."
Rowe and Stewart from Michigan preferred chondrosarcoma.
Toto from Loyola at Chicago, "chondroidmyxoma."
Dunlap and Barker from Kansas City, Missouri, "Benign histiocytic mucinoma."
Azar from Tampa, "Probable, recurrent pleomorphic adenoma with large "myoepithelial" cells."
Oxenhandler from Chattanooga, "Intranasal mixed tumor (Am J Clin Path 68:213-218, 1977)."

Weidner from Wake Forest, "I favor a diagnosis of mixed tumor."

Weather from Emory commented, "Malignant transformation from a previously benign mixed tumor (carcinoma expleomorphic adenoma). Some of the clear cells with the strings of cytoplasm were a bit reminiscent of the physaliferous cells of the chordoma, but I feel that this is adenocarcinoma."

Cardona Lopez from Honduras preferred chondrosarcoma, well-differentiated.

Gnep from St. Louis University discussed the diagnosis of this case during the conference. Following is an excerpt of his discussion.

"The differential diagnosis is between myxoid chondrosarcoma, a chordoma and benign mixed tumor. Of the three in my differential, I believe mixed tumor can be eliminated on the basis of histology. I have never seen myoepithelial cells line up in chains, or in such variations in size and shape in mixed tumors. Also mixed tumors of the nose behave in a fairly benign fashion and almost never recur. In addition, the majority of mixed tumors have a cellular epithelial component which is lacking in this case. The main differential diagnosis is between chordoma and myxoid chondrosarcoma. I favor the diagnosis of chordoma on the basis of the histology (chains of cells with vacuolated cytoplasm). To be absolutely sure one can do a cytokeratin stain EMA and lysozyme. Cytokeratin and EMA are positive in chordoma while lysozyme is negative. The opposite is true for myxoid chondrosarcoma.

The EM pictures were nonspecific. Chondrosarcomas have desmosomes but no profilaments while chordomas have both. In addition, chordomas have a particular array (cytoplasmic inclusion) of mitochondria alternating with rough endoplasmic reticulum. Mixed tumors will have characteristics of myoepithelial cells and ductal cells. The EM pictures we have are consistent with all 3, but not diagnostic of any!!

DIAGNOSIS: Chordoma."

CASE 6: POLYMORPHOUS LOW-GRADE ADENOCARCINOMA (S86-2389)
Contributed by J. B. Andelin, M.D., Mercy Hospital of Williston, Williston, North Dakota.

Polymorphous low-grade adenocarcinoma was the overwhelming diagnosis including its synonyms: lobular carcinoma, terminal duct carcinoma, trabecular carcinoma, low-grade sclerosing adenocarcinoma. There was also an opinion minority which included, "ductal adenocarcinoma; adenocarcinoma, probably adenoid cystic; monomorphic adenoma; adenoid cystic carcinoma (trabecular type); clear cell minor salivary gland tumor suggestive of myoepithelial origin."
CASE 7: OSSEOUS CHORISTOMA (SOFT TISSUE OSTEOMA) (T86-4227)
Contributed by Charles Dunlap, D.D.S. and Bruce Barker, D.D.S.,
Department of Oral Pathology, University of Missouri-Kansas City,
School of Dentistry, Kansas City, Missouri.

Although osseous choristoma was the preferred designation, others used
different terminology including soft tissue osteoma; osseous metaplasia;
reactive periostal ossification secondary to bone hemangioma;
liopoifibromyxoma; benign mesenchymoma; peripheral ossifying fibroma;
and hamartoma.

Azzopardi from London commented, "Osteomatosiis circumscripta
palati. If there is no such condition, this is the first case."

CASE 8: PROLIFERATIVE VERRUCOUS LEUKOPLAKIA (86-1608 and 86-16230)
Contributed by Charles Dunlap, D.D.S. and Bruce Barker, D.D.S.,
Department of Oral Pathology, University of Missouri-Kansas City,
School of Dentistry, Kansas City, Missouri.

There was a range of variations of the diagnoses among the consultants.
A random selection of opinions:

El-Mofty and Waldron from Washington University of St. Louis, "Both
slides show atypical verrucous epithelial hyperplasia. We strongly
suspect that this patient probably has a diffuse squamous cell
carcinoma but I am hesitant to making unequivocal diagnosis of
carcinoma on these slides. I saw many lesions of this type in my 25
years at Emory and at least around the laboratory we used to call this
type of reaction "snuff dippers creeping cruds"."

White from Kentucky offered the following, "86-1608-verrucous
carcinoma; 86-1623-verrucous keratosis. Will not doubt progress."

Krutchkoff and Eisenberg, "Verrucous carcinoma (with prominent
suggestion of viral modification)."

Tomich from Indiana, "Verrucous carcinoma. It appears as though this
patient has "proliferative verrucous leukoplakia" as described by Hansen
and his colleagues."

Tarpley and Corio from Georgetown offered, "Proliferative verrucous
leukoplakia, grade 5-6."

Gnepp from St. Louis University, "1608-squamous papilloma; 1623-
verrucous carcinoma."

Oxenhandler from Chattanooga, "Verrucous hyperplasia - I suspect many
people will call this a verrucous carcinoma."

Sciubba and Kahn from Stony Brook, "86-1608: A reasonably acceptable
verrucous carcinoma, while the papillary lesions (86-1623) reflect an
earlier stage of verrucous carcinoma. We prefer not to use the term
"verrucous hyperplasia" for the latter since we feel the carcinoma
designation more appropriate."

Donath from hamburg, "Florid papillomatosis with severe dysplasia."

Weathers from Emory, "(86-1608) Atypical epithelial hyperplasia
(verrucous hyperplasia of Pindborg) or (progressive verrucous
leukoplakia of Silverman, or "creeping cruds" of Waldron and Weathers).
It is interesting that some of the parakeratin, both morphologically and
tinctorially, remind one of a verruciform xanthoma. Also, there is
abundant superimposed candidiasis. (86-1623) Verrucous carcinoma.
(This is an end stage of the process noted on the previous slide)."
Glass, Young, and Rohrer, "Lou Hansen's Disease" (proliferative leukoplakia).
Hansen and Associates from University of California, San Francisco, "86-1608: Proliferative verrucous leukoplakia, grade 7. 86-1623: Proliferative verrucous leukoplakia, grade 6."

CASE 9 HISTOPLASMOSIS (86-1466 clinical photo only)
Contributed by Charles Dunlap, D.D.S and Bruce Barker, D.D.S., Department of Oral Pathology, University of Missouri-Kansas City, School of Dentistry, Kansas City, Missouri.

No microscopic preparation was distributed with this case since the contributor felt the visual characteristics of the lesion were sufficient to establish the correct diagnosis. (????????)

After reviewing all the opinions received, the most consistent diagnosis was "microscopic slide missing." Another popular diagnosis was "could be anything" although somebody with more precision offered, "It could be from anything, from a pyogenic granuloma all the way to metastatic malignant melanoma."

Krutckoff and Eisenberg, "The best we can do here is to formulate a differential diagnosis. A) Hyperplastic granulation tissue must be considered although this is unlikely in view of yellowish nodularity. B) Granulomatous infection must be considered. This is also unlikely in view of the healthy status and also because the lesion is apparently a solitary, isolated process. C) A malignant tumor appears to be most probable due to: 1) color; 2) nodularity; 3) indistinct margins."

Lumerman, Freedman, and Kerpel offered the following, "Our differential includes squamous cell carcinoma, eosinophilic granuloma, pyogenic granuloma and some sort of granulomatous lesion such as a fungal infection. We suppose that other more rare lesions such as metastatic carcinoma or a lymphoma should be considered as long shots."

LeGal from Strasbourg, "Slide missing. I am glad. No error on this case."
Sprague from Nebraska, "With no further information, we might be obliged to call this "bump on the gum." However, since this is a very, very erudite seminar, we must consider the possibility of a metastatic lesion versus a primary inflammatory lesion such as peripheral odontogenic fibroma of the WHO type or peripheral giant cell granuloma or similar lesions.

Weathers from Emory, "I would have to give a differential on this one since we received only a 35 mm clinical, and I would suggest foreign body reaction, peripheral ossifying fibroma, deep fungal infection, or a squamous carcinoma. I tend to prefer the latter for the reasons that I have seen one similar to this previously, and since this is a CPC."

During the presentation, Dr. Dunlap showed several photographs of lesions similar to the present one and all exhibited some detail highly suggestive of histoplasmosis. In all instances, there was confirmatory clinical, roentgenographic and pathologic evidence.
CASE 10: METASTATIC MALIGNANT MELANOMA (51928)
Contributed by Miguel A. Simon, M.D., Professor of Pathology, San Juan, Argentina.

The unanimous diagnosis was metastatic malignant melanoma.

Dr. Simon was able to obtain additional information: the patient had a malignant melanoma removed from the skin which in the opinion of Dr. Simon represented a nodular melanoma.