CASE 1: 88-489 (1 slide)
Contributed by Drs. Charles Dunlap and Bruce Barker, University of Missouri-
Kansas City School of Dentistry, Kansas City, Missouri.

A gingival swelling in a 39 year old male. The patient stated that the area
developed in a two day period. A subtle radiolucency was seen between the
mandibular bicuspids in the same area as the swelling. Clinical impression was
a giant cell granuloma.

CASE 2: 88-989 (1 slide)
Contributed by Drs. Bruce Barker and Charles Dunlap, University of Missouri-
Kansas City School of Dentistry, Kansas City, Missouri.

A sharply circumscribed radiolucent lesion in an edentulous area of the left
posterior mandible. The area was asymptomatic. The patient was a 27 year
old female.

CASE 3: 88D-4285 (1 slide & 1 radiograph)
Contributed by Charles E. Tomich, D.D.S., M.S.D., Department of Oral
Pathology, Indiana University, Indianapolis, Indiana.

A 63 year old female was aware of tenderness and swelling of her left
mandible for 2-3 weeks. A week earlier she had an extraction of a maxillary
molar because "it was striking (her) lower jaw". Radiographic examination
revealed a lytic lesion of the left posterior mandibular body and angle
extending superiorly into the ramus. An incisional biopsy was performed.

CASE 4: 3650-38 (1 slide)
Contributed by Virgilio Cardona Lopez, M.D., Tegucigalpa, D.C., Honduras.

6 year old girl who developed a cystic lesion of 5 x 5 mm. in the cheek,
producing some difficulties while eating.

CASE 5: 53044 (1 slide)
Contributed by Miguel A. Simon, M.D., San Juan, Argentina.

JPH is a 53 year old male who had surgery on four occasions because of polyps
in left nasal cavity. Two of the lesions were diagnosed as Schneiderian
papilloma. The lesion has been curetted in its entirety. What should be done
to the patient?
CASE 6: S-88-0628.1 & S-88-0628.2 (2 slides)
Contributed by William R. Watson, Jr., D.D.S., Resident and Harold L. Hammond, D.D.S., M.S., Professor, Department of Oral Pathology and Diagnosis, College of Dentistry, University of Iowa, Iowa City, Iowa.

5 year old Caucasoid male with a 5 cm. in diameter radiolucency of the right maxilla surrounding the crown of the unerupted first permanent molar. There is no sensory impairment.

CASE 7: S-87-0571 A & B (2 slides)
Contributed by William R. Watson, Jr., D.D.S., Resident and Harold L. Hammond, D.D.S., M.S., Professor, Department of Oral Pathology and Diagnosis, College of Dentistry, University of Iowa, Iowa City, Iowa.

12 year old Caucasoid male presented with swelling of the left maxillary sinus and face noticed approximately one and one-half months ago. A large radiolucency involves the left maxilla and sinus.

CASE 8: 88-744 (1 slide and 1 x-ray)
Contributed by Carlos Perez-Mesa, M.D., Ellis Fischel State Cancer Center, Columbia, Missouri.

59 year old caucasian male who developed an ulcerated lesion in the right buccal cavity, which according to patient, started approximately 1 year before seeking medical help. A roentgenogram of the mandible as well as a biopsy of the lesion is included.

CASE 9: 88-2027 (1 slide)
Contributed by John Carlson, M.D. Audrain Medical Center, Columbia, Missouri.

31 year old female with painless right parotid mass.

CASE 10: 88-886 (1 slide)
Contributed by Carlos Perez-Mesa, M.D., Ellis Fischel Cancer Center, Columbia, Missouri.

This 86 year old caucasian male, in the month of June, had a malignant melanoma removed from his right neck, Clark's Level III, 9 mm thickness. Two months later a nodule in the right submaxillary region was noted. The rest of the physical exam was negative. The entire nodule was excised and is included in your slide.
The discussion of the following cases was held at the Lodge of the Four Seasons, Lake Ozark, Missouri.

CASE 1: MYXOMA (88-489)
Contributed by Drs. Charles Dunlap and Bruce Barker, University of Missouri-Kansas City School of Dentistry, Kansas City, Missouri.

The general consensus is that it represented an odontogenic myxoma. A few pertinent commentaries follows:

Weidner from Boston, "This lesion appears to be benign; and, although the name one applies to it is not likely important, I feel it has clinical (rapid growth) and pathologic (tissue culture-like) features similar to nodular fasciitis. In fact, the peripheral ossification even suggested myositis ossificans or calcifying fasciitis. Another consideration is "peripheral ossifying fibromyxoma." It is likely cured."

Azar from Tampa, "Myxofibroma. Because of its location and the presence of a focus of odontogenic epithelium, this lesion probably represents an odontogenic myxofibroma."

Waldron from Stone Mountain, Georgia, "The best I can do with this one is an aggressive, myxoid, mesenchymal tumor. I assume this is an intrabony tumor. I was first tempted to call it a hypercellular and atypical myxoma but the cells appear to have too much cytoplasm for a myxoma. There are some features suggesting embryonal rhabdomyosarcoma but this is very rare in an intrabony location and in this age group. I can't make out anything to make a myxoid chondrosarcoma or myxoid liposarcoma out of this either. So I'm really at a loss for a diagnosis."

Abrams from Los Angeles, "I cannot think of anything better than myxoma. It seems to be more cellular than usual and shows more cellular atypia. However, the lesion certainly has growth characteristics typical of myxoma."

Weathers from Atlanta, "Aggressive myxomatous lesion. I am afraid I can't go much further than that. I cannot identify it as a myxoid liposarcoma, chondrosarcoma, or rhabdomyosarcoma but it really doesn't look like the traditional odontogenic myxoma either. The violation of the cortex does suggest that it may act aggressively."

Hammond, Finkelstein, Vincent, Benjamin, Deahl, and Hellstein from Iowa City and Lumerman, Freedman and Kerpel from Flushing, New York prefer "myxoid neurofibroma."

Santa Cruz from St. Louis, "Interesting case. My best bet is an odontogenic myxoma, although I am aware of the twists of making such diagnosis in the oral cavity."

LeGal from Strasbourg called it "odontogenic myxoma" while Simon and Associates from Argentina prefer "perineural myxoma."

Other opinions include rhabdomyosarcoma and liposarcoma.
OSSIFYING FIBROMA (88-989)
Contributed by Drs. Bruce Barker and Charles Dunlap, University of Missouri-Kansas City School of Dentistry, Kansas City, Missouri.

Ossifying fibroma or cementifying fibroma were the terms used by the majority of the consultants. A few commentaries at random:

Azar from Tampa, "Benign fibro-osseous lesion consistent with ossifying fibroma. The distinction from fibrous dysplasia could be both difficult and arbitrary."

Abrams from USC, "Ossifying fibroma. Since it is apparently not possible for pathologists to distinguish bone from cementum, we designate all of these lesions as ossifying rather than cementifying or cemento-ossifying."

Sprague from Nebraska, "Since the lesion is described as "well circumscribed," a diagnosis of residual periapical cemental dysplasia must be entertained. However, we prefer to call this fibroosseous lesion, specifically cemento-ossifying fibroma."

Santa Cruz from St. Louis, "I favor the diagnosis of ossifying fibroma (cementifying fibroma). To be ruled out are fibrous dysplasia and perhaps periapical cemental dysplasia."

Ossifying fibroma was also the diagnosis of LeGal from Strasbourg.

CASE 3:

ADENOCARCINOMA (88D-4283)
Contributed by Charles E. Tomich, D.D.S., M.S.D., Department of Oral Pathology, Indiana University, Indianapolis, Indiana.

Several of the consultants including Weidner from Boston, Abrams from USC, Sprague from Nebraska consider the possibility of low-grade polymorphous adenocarcinoma. The possibility of being a metastatic lesion was also entertained by others.

A few commentaries:

Waldron from Stone Mountain, Georgia, "I believe this represents an adenocarcinoma and the problem will be to decide if it's a primary intrabony tumor or a metastasis. As I view the projected x-ray the maxillary tuberosity appears to be irregularly destroyed and this looks more extensive than I would expect to see as a result of the reported recent extraction. If there is maxillary involvement in addition to the large mandibular lesion, this must represent a metastatic lesion as synchronous maxillary and mandibular primary tumors would certainly be most unusual. If I'm mistaken on my interpretation of the one slide of the x-ray and the maxillary area is not involved, I still don't know if this is a primary or metastatic tumor in the mandible. I believe a primary tumor in some other site would have to be ruled out before accepting this as a primary adenocarcinoma of presumed salivary gland type."

Weathers from Atlanta, "A papillary cystic adenocarcinoma probably minor salivary gland origin, maybe carcinoma expleomorphic adenoma and possibly metastatic. I think it would certainly be worthwhile to workup the patient for a primary."

Hori from New Mexico consider "Adenocarcinoma, ? metastatic."

Dunlap and Barker from Kansas City, Missouri, "Adenocarcinoma, uncertain origin."

Gnepp from St. Louis University, "Metastatic adenocarcinoma vs. primary salivary gland carcinoma arising in an intrabony site. Favor metastatic."
Lumerman, Freedman, Kerpel from Flushing commented, "Adenocarcinoma, low grade, NOS. We do not believe this tumor is "polymorphous" enough to warrant the designation "polymorphous low-grade" nor do we feel that this tumor shows much resemblance to lobular (terminal duct) adenocarcinoma."

During the discussion of the present case, some of the members were interested in knowing more about the concept of Dr. Lumerman concerning the distinction between polymorphous low-grade adenocarcinoma and lobular terminal duct adenocarcinoma. I wrote a letter to Dr. Lumerman and his answer is attached.

Chuck Tomich the contributor stated, "Adenocarcinoma. The patient had a segmental resection of her mandible and is currently doing well. Thorough diagnostic evaluation prior to surgery failed to reveal a primary elsewhere. Therefore, this is believed to have arisen from enclaved accessory salivary gland."

**CASE 4: CYSTICERCOSIS (3650-88)**
Contributed by Virgilio Cardona Lopez, M.D., Tegucigalpa, D.C., Honduras.

This was the overwhelming diagnosis.

Azar from Tampa commented, "Helminthiasis, probably cysticercosis. Although two "suckers" are noted, I find no hooklets."

Simon from Argentina commented, "Cysticercosis with typical invaginated scoleces and layers. I can not recognize the hooks of the scolex. (In the hydatid cysts, very frequent in our country, we prepare a touch preparation without staining and moving the condensor by refractancy the hooks can be readily identified.)"

**CASE 5: NONKERATINIZING SQUAMOUS CELL CARCINOMA (53044)**
Contributed by Miguel A. Simon, M.D., San Juan, Argentina.

The opinion of the consultants was almost evenly divided between benign vs. malignant. A random sample of the opinions follows:

Weidner from Boston, "Inverted papilloma. I would submit all the tissues for light microscopic examination to rule out carcinoma. A discussion of the management of inverted papilloma can be found in Laryngoscope 91:2071, 1981."

El-Mofty from St. Louis, "Inverted papilloma, not enough malignant features to warrant a diagnosis of carcinoma."

Santa Cruz from St. Louis, "Schneiderian papilloma. I see no evidence of malignancy."

Glass, Young, Rohrer from Oklahoma City, "This appears to be an infected inverted papilloma and a wide excision would be the treatment of choice."

Azar from Tampa, "Infiltrating carcinoma, "transitional" type. This is no longer an inverted papilloma. Suggested treatment requires both vigorous curetting of nasal cavity (plus sinuses, if involved), followed by radiotherapy."

Lumerman, Freedman, Kerpel from Flushing, "Nonkeratinizing carcinoma of nasopharynx. With this diagnosis in mind, obviously we believe the patient requires a definitive surgical procedure."

Dunlap and Barker prefer squamous cell carcinoma.
Gnepp from St. Louis, "Nonkeratinizing epidermoid carcinoma is best diagnosis although there is focal keratin production (this is allowed by WHO classification)."

White from Kentucky, "Believe this is a squamous cell carcinoma. Further surgery indicated."

Tomich from Indiana, "Papillary carcinoma. After excision, I believe the patient should be radiated."

Hansen from San Francisco, "Irrespective of the diagnosis, we believe this patient warrants complete extirpation by radical surgery."

Weather from Georgia, "This is probably still a papilloma but the line between one of these papillomatous lesions and a low grade squamous carcinoma is very fine. Radical surgery will be necessary to extirpate the lesion."

CASE 6: #1: DENTIGEROUS CYST; #2: ATYPICAL ADENOMATOID ODONTOGENIC TUMOR (S-88-0628.1 & S-88-0628.2)
Contributed by William R. Watson, Jr., D.D.S., Resident and Harold L. Hammond, D.D.S., M.S., Professor, Department of Oral Pathology and Diagnosis, College of Dentistry, University of Iowa, Iowa City, Iowa.

CASE 6: #1: DENTIGEROUS CYST; #2: ATYPICAL ADENOMATOID ODONTOGENIC TUMOR (S-88-0628.1 & S-88-0628.2)
Contributed by William R. Watson, Jr., D.D.S., Resident and Harold L. Hammond, D.D.S., M.S., Professor, Department of Oral Pathology and Diagnosis, College of Dentistry, University of Iowa, Iowa City, Iowa.

A wide variety of diagnoses were offered. A few samples of diagnostic impressions are selected to express the pluralism of interpretations.

Waldron commented, "I believe the differential rests between the so-called plexiform unicystic ameloblastoma described by Gardner and an inflammatory papilliferous epithelial hyperplasia which Merv Shear calls "odontogenic papilloma". On the basis of the material I have, I favor the latter but would like to see more sections."

Abrams from USC, "There really is not sufficient tissue to make an accurate and reliable diagnosis. This tissue is compatible with inflamed plexiform unicystic ameloblastoma or possibly only a hyperplastic dentigerous cyst. I would think conservative treatment is indicated."

Lumerman, Freedman, Kerpel, "Odontogenic cyst with marked hyperplasia and edema of the stratified squamous epithelial lining. We have had experience with a case in a young boy that was almost histologically identical to this case. After conservative treatment, the patient returned 3 years later with a "recurrence" (residual lesion?). Removal of the recurrence revealed an inflamed residual cyst without evidence of ameloblastic changes or features of any other epithelial odontogenic tumor."

Meyer from St. Louis, "Dentigerous cyst with benign process, possibly reactive (consider granulation tissue, epithelioid hemangioma)."

El-Mofty from St. Louis, "Benign odontogenic epithelial neoplasm. The cells seem to be producing vascular structures. Have not seen anything exactly like it before."

Glass, Young, Rohrer from Oklahoma City, "This appears to be a cyst with an associated odontogenic tumor with severe inflammation. The tumor is probably an AOT."

Dunlap and Barker commented, "Unique and previously unreported lesion, benign."

Additional comments were submitted by Dr. Hammond which is appended at the end of the proceedings.
CASE 7: ADENOMATOID ODONTOGENIC TUMOR (S-87-0571)
Contributed by William R. Watson, Jr., D.D.S., Resident and Harold L. Hammond, D.D.S., M.S., Professor, Department of Oral Pathology and Diagnosis, College of Dentistry, University of Iowa, Iowa City, Iowa.

This was the overwhelming diagnostic opinion.

CASE 8: METASTATIC MUCIN PRODUCING ADENOCARCINOMA, PRIMARY LUNG (88-744)
Contributed by Carlos Perez-Mesa, M.D., Ellis Fischel State Cancer Center, Columbia, Missouri.

The diagnosis of adenocarcinoma was universal. Many considered the possibility of metastasis.

White from Kentucky commented, "Adenocarcinoma. Rule out metastatic before settling on primary lesion such as a higher grade mucoepidermoid carcinoma."

A large adenocarcinoma of the left lung was found which was found during subsequent studies done to the patient; presently he is being treated by irradiation therapy and chemotherapy.

CASE 9: PLEOMORPHIC ADENOMA (88-2027)
Contributed by John Carlson, M.D., Audrain Medical Center, Mexico, Missouri.

The consensus of opinions agree with the diagnosis, however, some of the consultants made commentaries of interest.

Weidner from Harvard, "I have seen tumors like this before, and I'm unsure of the proper diagnosis. They share features of monomorphic adenoma, mixed tumor, and a low-grade carcinoma (possibly epithelial-myoepithelial type). My slide contains numerous nerves, none of which show invasion. I believe this lesion has potential to recur locally and (much less commonly) spread to regional lymph nodes. The tumor should be widely excised and the patient followed. Possibly we should borrow some terminology from our OB/GYN pathology colleagues and call tumors like this atypical adenomyoepitheliomas of borderline malignant potential?"

Waldron from Stone Mountain, Georgia, "Although this appears to be fairly well-circumscribed and has some areas of fairly decent benign mixed tumor in it, there is one area of apparent break through of the capsule and areas of disturbing cellularity. This may represent carcinoma ex mixed tumor."

Lumerman, Freedman, Kerpel, "Multinodular pleomorphic adenoma. No definite infiltration is evident although in one area we can see that a nerve trunk has been entrapped between tumor lobules. Although the tumor is cytologically benign, its multinodularity and nerve entrapment is worrisome."

Weathers from Emory, "Is this a carcinoma in situ, ex pleomorphic adenoma? or a cellular (atypical) mixed tumor?"

Santa Cruz from St. Louis, "Pleomorphic adenoma with areas of myoepithelioma."

Gnepp from St. Louis University, "Poor slide - probably malignant, low-grade carcinoma? basal cell adenocarcinoma?"
Tomich from Indiana, "Pleomorphic adenoma. Perhaps "myoepithelioma" would be a more appropriate designation."

Hansen from San Francisco, "This case provoked a great deal of discussion and we ended with a diagnosis polymorphous malignant neoplasm, NOS. We saw features of alveolar rhabdomyosarcoma, angiosarcoma, and acinic cell adenocarcinoma."

LeGal from Strasbourg, "This is a benign, essentially intraductal complex proliferation of epithelial cells and spindle shaped cells, probably myoepithelial in origin. It is reminiscent of the common variety of breast tumor in dogs. One may call it trabecular papillary adenoma rather than adenoid cystic tumor as it is benign."

Simon and Associates from San Juan, Argentina, "Membranous adenoma in a mixed tumor. There is a satellite nodule outside the tumor."

Cardona Lopez from Honduras preferred "adenoid cystic carcinoma."

FOLLOW-UP: The patient is presently free of abnormalities.

CASE 10: FOLLICULAR MALIGNANT LYMPHOMA, PREDOMINANTLY SMALL CLEAVED (88-896)

Contributed by Carlos Perez-Mesa, M.D., Ellis Fischel State Cancer Center, Columbia, Missouri.

With a few exceptions, the diagnosis of lymphoma, with a few variations in the type, was the overwhelming diagnosis.
In response to your letter of November 7th, 1988 concerning our contribution S-88-0628.1 & S-88-0628.2 (your see #6) to the Ellis Fischel Oral Pathology Seminar #99, I.P.S. 88-900.

With an inspired explanation of our detailed, systematized evaluation of the historical, clinical, gross, histological, ultrastructural, and immunohistochemical features of this lesion, comparing and contrasting those findings with those of all other diseases, until the definitive diagnosis emerged. However, I can't.

I considered the initial or concurrent pathological alteration to be a dentigerous cyst (S-88-0628.1, i.e., Case 6, Slide A) excised with the crown of the unerupted maxillary right first permanent molar. Additionally, apparently discrete gingival lesions (S-88-0628.2, i.e., Case 6, Slide B) were noted. This luminal proliferation appeared to be prominently exocytotic and edematous polyhedral to ovate to occasionally spindled epithelial cells with homogeneous eosinophilic cytoplasm and conspicuous, round to oval, homogeneous nuclei and inconspicuous nucleoli. There was some variation in nuclear size, shape, and staining and there were scattered mitotic figures. Congested, thin-walled vessels were prominent in a scant fibrocollagenous connective tissue stroma.

I did not consider the lesion to bear any resemblance to ameloblastoma. We ruled out plexiform unicystic ameloblastoma because we interpreted the lesion to be predominantly epithelium, essentially a "solid lesion" with little stroma, not the fastenonsing network of stratified squamous epithelium within a delicate connective tissue stroma described by Gardner. We also excluded a reactive epithelial proliferation on essentially the same bases.

I seemed that we were then left with either (1) atypical calcifying epithelial odontogenic tumor, (2) atypical adenomatoid odontogenic tumor, or (3) "benign epithelial odontogenic tumor, not otherwise specified". Any of these diagnoses would seem acceptable.

Age of mineralization or amyloid which can be seen with either calcifying epithelial odontogenic tumor or adenomatoid odontogenic tumor were not present. Adenomatoid arrangements which are seen in adenomatoid odontogenic tumor were not present. The epithelial cells appeared much more "bland" than those usually associated with calcifying epithelial odontogenic tumor.

I would appear to leave "benign epithelial odontogenic tumor, not otherwise specified" as the best diagnosis. To some of our medical component appeared consistent with the more "bland appearing" calcifying epithelial odontogenic tumors, others of us the epithelial components appeared most consistent with the "non-adenomatoid" epithelial areas of the adenomatoid odontogenic tumor. [This latter feature can be compared with the "non-adenomatoid" areas of our other lesion for this seminar (S-87-0571.A, i.e., Case 7, Slide A, and S-87-0571.B, i.e., Case 7, Slide B), a much more classic adenomatoid odontogenic tumor.]

I was not quibble with either of the 3 diagnoses noted previously. I was one of the "others of us" noted above and the "shoved-out" as atypical adenomatoid odontogenic tumor.

Sincerely,

[Signature]

Harold L. Hammond, D.D.S., M.S.
November 14, 1988

Dr. Carlos Perez-Mesa
Director of Pathology
Ellis Fischel State Cancer Hospital
115 Business Loop 70 West
Columbia, Missouri 65203

Dear Dr. Perez-Mesa,

Thank you for your note of November 7, 1988 in which you requested that we elaborate on our distinction between lobular carcinoma, polymorphous low-grade carcinoma and other adenocarcinomas of minor salivary gland origin.

Our opinion regarding Case #3 of the last slide exchange set relates to our belief that the classification of intracoral minor salivary gland adenocarcinomas is still quite incomplete and is not clarified by lumping all well-differentiated tumors of this type under the term "polymorphous low-grade adenocarcinoma".

As you know, the term adenocarcinoma when applied to minor salivary gland tumors traditionally has been used over the years to describe a histologically diverse group of malignant glandular tumors that clearly did not belong to the other well established categories of salivary gland malignancies.

Over the years, numerous publications have described large numbers of these lesions with attempts made at naming and describing the various subtypes. Unfortunately, in every instance, no effort was made to describe each subtype separately with detailed reference to their histomorphy, clinicopathologic features, biologic behavior, treatment and follow-up. This understandably has led to a great deal of confusion regarding this varied group of salivary gland neoplasms.

When we described lobular carcinoma (which we believe is, in every way, identical to the terminal duct cell carcinoma described by Datsakis et al.), we gave it a specific designation, described its unique histologic features in great detail and presented follow-up information in an attempt to define one specific subtype of minor salivary gland adenocarcinoma. Whether one agrees with the name "lobular" is not relevant. What is important, is that the tumors in our original series, and the numerous other examples we have seen since, did not show the "histologic diversity" described by Evans and Datsakis in their publication on polymorphous low-grade adenocarcinoma.
We have seen a few examples of minor salivary gland adenocarcinomas which show the histologic diversity of those tumors described by Evans and Batsakis. We designate these tumors polymorphous adenocarcinomas, but believe that they are much less common than the lobular (terminal duct cell) carcinoma.

Our objection to the inclusion of lobular (terminal duct cell) carcinoma under the term "polymorphous low-grade" is that this umbrella term again lumps together a histomorphologically diverse group of tumors without describing their individual predominant features, their biologic behavior, and the treatment and follow-up of each morphologic subtype.

In their paper, Evans and Batsakis describe tumors that exhibit tubules, solid nests & trabeculae, papillae, cysts, cribiform or pseudopapillary cystic formations, strands, fascicles, clear cells, oxyphilic cells and mucous cells. Of their 14 cases, 3 recurred (2 with metastases, one recurrence alone) and 1 metastasized (without local recurrence). What were the predominant histologic features of these four cases? How "polymorphous" were they? Evans and Batsakis state that the terminal duct cell carcinoma is a subtype of polymorphous low-grade carcinoma "with predominance of the fascicular pattern". Did the recurrent and metasatic tumors show diverse histologic features or did one of the above described patterns predominate? From the information presented in their paper, it is impossible to answer these questions.

The term "polymorphous low-grade" differs from the traditional term "adenocarcinoma" only in that the former term implies that it is clear that these tumors are "low-grade". How has it been determined that they all are low-grade?

It may be shown, after many years of careful study, that all well-differentiated minor salivary gland adenocarcinomas have the same biologic behavior. In that case, the generic term "adenocarcinoma" will suffice to describe these lesions. At this point in our developing understanding of these tumors, to lump all the well-differentiated adenocarcinomas under the umbrella term "polymorphous low-grade" is imprecise and will prevent us from learning about the true nature of the individual subtypes of this diverse group of lesions.

I hope this answer clarifies our opinion regarding this subject. Thank you for allowing us this opportunity to explain our position.

Sincerely,

Paul D Freedman, DDS
Stanley M. Kerpel, DDS
Harry Lumerman, DDS