Labial gland biopsies in the diagnosis of Sjögren’s syndrome

A. Hills*, B. Virdi, K. Gowans, J. McKenzie

East Kent Hospitals University NHS Foundation Trust, United Kingdom

Background: Labial gland biopsies are invasive and the logical information gathered from them is key to establishing a definitive diagnosis in Sjögren’s syndrome. Insufficient sampling and inaccurate reporting risks unnecessary morbidity, however no consensus on the diagnostic criteria currently exists. Following consultation with the East Kent Hospitals University Foundation Trust head and neck lead histopathologist, a standard was devised where six or more minor salivary gland lobules were required to be deemed of sufficient diagnostic quality, and a focus score of 1 or more (1 focus score is 1 mm² with more than 50 lymphocytes) as diagnostic of Sjögren’s syndrome. An initial retrospective audit between 11 December 2011 and 28 October 2014 of our Trust (population of 759,000) established that biopsies were of insufficient diagnostic quality and reporting inadequate, with many failing to comment on the focus score or number of lobules.

Method: We retrospectively reviewed all Sjögren’s related labial gland biopsies between 01 November 2014 and 27 September 2016 using our histopathology database, following implementation of the newly established standard.

Results: 37 biopsies met the selection criteria. 23 (62%) had sufficient diagnostic quality, 20 (54%) had focus score reported. 15 (40%) were both of sufficient diagnostic quality and reported the focus score. 17 (46%) were both diagnostic and reported as positive for Sjögren’s syndrome, but 3 had no numeric focus score.

Conclusion: The implementation of new standards in 2014 has improved diagnostic consistency. Reporting and harvesting of labial gland biopsies has been recognised as being predominantly performed by junior trainees, therefore teaching is to be implemented to improve accuracy.

Peripheral odontoameloblastoma in an elderly man: a case report and literature review

M. Hurrell*, Z. McNamara, E. Hsu

University of Queensland, Australia

Odontoameloblastoma (OA) is a very rare and unusual odontogenic neoplasm comprised of both odontoma and ameloblastoma tissue. It is thought that the lesions arise via proliferating ameloblastic epithelium that induces neighbouring mesenchymal tissue to form mineralised dental tissue. The clinical behaviour of OA is said to resemble the more sinister ameloblastic component, and aggressive treatment has typically been prescribed. To date, the published literature is limited to a small number of case reports, with lesions limited to people below 50 years of age. This case report likely presents the first case of OA in an elderly man, who presented with a painless lump beneath the mucosa of the right cheek. The case satisfies the three requisite histologic criteria set out by Kaugars and Zussmann for such a diagnosis; unequivocal ameloblastoma, connective tissue with a mature, homogeneous appearance, and fragments of malformed calcified dental structures.1

Keratocystic odontogenic tumour of anterior maxilla mimicking radicular cyst: a case report

U. Kamali*, D. Lim

University of Malaya, Kuala Lumpur, Malaysia

Keratocystic odontogenic tumours (KCOT), previously known as odontogenic keratocysts (OKC), are benign cystic neoplasms involving the mandible or maxilla and believed to arise from dental lamina. They are locally aggressive and have high recurrence potential rate due to its infiltrative behaviour. KCOT usually presented in young age, second to third decade of life, most commonly occur in posterior body and ascending ramus of mandible.

We report an unusual presentation of keratocystic odontogenic tumour of anterior maxilla, which mimicked a radicular cyst in a 67-year-old male. Following completion of root canal treatment for tooth 11, enucleation and peripheral ostectomy were performed.

Reference

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Squamous odontogenic tumour: a case report

S. Jung

School of Dentistry, Chonnam National University, South Korea

Background: The squamous odontogenic tumour (SOT) is a rare benign odontogenic epithelial neoplasm, which is deemed to be originating from the rests of Malassez. There are less than 30 cases reported by these days. Even though the lesion is known to be asymptomatic, it may present with symptoms of pain, swelling and tooth mobility. The characteristic radiographic appearance normally shows a unilocular radiolucency associated with the roots of teeth. The SOT is frequently seen in the anterior maxilla and the posterior mandible. Histologically, the tumour is characterised by the formation of variably sized nests and cords of uniform, benign-appearing, squamous epithelium with occasional vacuolisation.

Patient: The 12-year-old male patient visited Chonnam National University oral and maxillofacial surgery (OMFS) department. Approximately one month before visiting OMFS department, the patient visited Chonnam National University ear, nose, and throat department with chief complaint of swelling and localised fever on left cheek and intraorbital area. Marsupialisation of left sinus ostium area using endoscope was performed. However, the swelling had onset after one month and patient was referred to Chonnam National University OMFS department due to growing mass on left maxillary antrum.

Method: Patient underwent surgery under general anaesthesia. Surgery was performed in a similar manner to Caldwell-Luc surgical procedure. The cystic lesion was removed with No. 28 tooth, and No. 27 tooth was extracted due to severe supporting bone loss. Biopsy result was found out to be squamous odontogenic tumour.

Findings: At three months follow-up computed tomography, the enucleated area did not show any remarkable change. And the symptom of the patient remained asymptomatic.

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with intraoperative use of Carnoy’s solution. Histopathological examination of the specimen confirmed it as KCOT. Currently, the patient was put under strict periodical follow-ups. As of six months follow-up, no sign of recurrence noted clinically and radiologically. Surgeons should be aware of such atypical presentation of KCOT to avoid misdiagnosis.

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**Odontogenic myxoma: report of three cases**

S. Konchanthes*, C. Chinkrua, W. Chatupos, T. Khamchai

*Department of Oral and Maxillofacial Surgery, Chiang Mai, Thailand*

**Background:** Odontogenic myxoma (OM) represents an uncommon benign odontogenic tumour of the jaw bone with locally aggressive behaviour. Most reports show a slight predilection for females. It is a slow growing tumour consisting of an accumulation of mucoid ground substance with little collagen. Radiographic features are always lucent, although the pattern may be quite variable. It may appear as a well-circumscribed or diffuse lesion.

**Objectives:** To report three cases of odontogenic myxoma. Clinical findings and radiological features along with diagnostic and treatment were review.

**Methods:** Three cases of odontogenic myxoma, age ranged from 10 to 42 years, were diagnosed and underwent surgical treatment at the Faculty of Dentistry, Chiang Mai University between 2013 and 2015. Biographic profiles, clinical manifestations, radiological features and surgical treatment of each case were analysed.

**Findings:** Most of patients presented with a non-tender, bony hard swelling of jawbone. Radiograph showed unilocular radiolucency in two cases and multilocular radiolucency (tennis racquet strings appearance) in one case. All cases wunderwent bone resection. No clinical or radiological signs of recurrence have been found until now.

**Conclusions:** Surgical treatment of odontogenic myxoma varies from simple enucleation and curettage to bony resection. We discuss the important factors that must be considered when determining the proper management approach to odontogenic myxoma. Long-term follow up examination should be performed.

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**Chronic recurrent mandibular osteomyelitis consistent with SAPHO syndrome: a case report**

P. Kumplanont

*Institute of Dentistry, Suranaree University of Technology, Nakornnakhon, Thailand*

Synovitis, acne, pustulosis, hyperostosis, and osteitis (SAPHO) syndrome is a rare condition of nonsuppurative osteomyelitis. Its name is an acronym for various osteoarticular and dermatological manifestations that can appear in the same patient. Its diagnosis is based on medical history, clinical symptoms, imaging, histopathology, and scintigraphy bone scan that show inflammation of bone with neither abscess nor sequestrum.

Appropriate treatment cannot be concluded.

An eight-year-old boy consistent with SAPHO syndrome presented. He had an underlying disease of beta Thalassemia, haemoglobin type E. He first presented with two-month painless, hyperostotic mandibular swelling, with later intermittent painful swelling of the surrounding soft tissue and third degree mobility of the anterior teeth. Severe trismus was also appeared later. There was neither pus or chronic fistula nor any sequestration. Radiograph showed ill-defined mixed radiolucent and radiopaque of expanded mandible, no root resorption. Scintigraphy bone scan showed two active osteomyelitis foci: mandible and finger bone. Histopathological examination showed nonspecific acute and chronic inflammation of bone and soft tissue with the diagnosis of nonsuppurative osteomyelitis. The patient was treated with various modalities including antibiotics (Augmentin, penicillin), non-steroidal anti-inflammatory drugs (NSAIDs; Ibuprofen), and decortications. These treatments seemed to provide some improvement but not cure, particularly NSAIDs. Improvement of inflammation, trismus and bone swelling was seen after the child was growing.

After a long-term of 10-year follow-up, the patient had symptom-free with underdeveloped mandible caused by previous trismus. The patient is still in the follow-up appointments. Steps of diagnosis and treatment strategies of this interesting case are presented.

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**Comparative study of metronidazole and clarithromycin in the treatment of severe chronic periodontitis**

C.X. Li†, Z.C. Gong, Z.Q. Lin, H. Liu

*Department of Oral and Maxillofacial Oncology Surgery, Stomatological Medical Center, The First Affiliated Hospital of Xinjiang Medical University, China*

**Objective:** To compare the clinical efficacy of metronidazole and clarithromycin in the treatment of severe chronic periodontitis, provides the evidence and reference for the clinical therapy.

**Methods:** 112 severe chronic periodontitis patients were enrolled to conduct oral clarithromycin treatment after stomatological conventional basic therapy, which is the observation group (OG), in our hospital from September 2015 to the present. Retrospective analysis between the observation group and the control group (CG), the patients who were given oral metronidazole treatment after stomatological conventional basic therapy, is chosen to compare their prognostic indicators three months after treatment such as sulcus bleeding index (SBI), probing depth (PD), attachment level (AL), and the inflammatory factors in gingival fluid of 7 days before and after treatment, which include interleukin-1 (IL-1), tumour necrosis factor–α (TNF-α).

**Results:** There was no significant difference in SBI, PD, AL, IL-1, and TNF-α between the two groups (P > 0.05) before the treatment, but they had comparability. After the treatment, they all had declined than before, especially the PD and AL of OG were lower than CG (P < 0.05). Meanwhile, seven days after the therapy, IL-1 and TNF-α of OG were lower than CG too (P < 0.05).

**Conclusion:** The curative effect of clarithromycin in the treatment of patients with severe chronic periodontitis is better than that of metronidazole. Accordingly, the clarithromycin therapy is worthy of promotion and extension.

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