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A middle-aged man presented with a two weeks history of painful right submandibular swelling. This swelling had been slowly increasing in size over the past 10 years but without any history of pain. The pain he experienced was not increased while taking meal. Intra-oral examination showed a hard bony-white coloured mass at the right retromolar trigone (**Panel A**). It was fixed to the underlying structure. An orthopantomogram was obtained (**Panel B**).

What is the diagnosis?

Answer: refer to page 224

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(Refer to page 204)**Answer: A giant right submandibular sialolith with erosion into the oral cavity**

This patient has a calcified lesion at the right retromolar trigone area and a orthopantomogram showed a large radio-opaque irregularly shaped bone density mass (>4 0mm in any dimension) near the proximal part of the body of the right mandible. The cortical line of the mandible is preserved. There was also pus collection in the adjacent area most probably due to chronic sialadenitis.

Sialolithiasis contributes to more than 50% of diseases affecting the major salivary glands. Sialoliths are more commonly seen in submandibular glands than parotid or sublingual glands. Minor salivary glands involvement is extremely rare. Sialolithiasis is most common in the 30 to 60 years age group. Males are more frequently affected. Giant sialolith refers to salivary gland stone that are more than 15mm in any one dimension.^{1, 2}

The exact cause of sialolithiasis is uncertain. Suggested risk factors include long standing salivary stasis and ductal inflammation. There are also association with diabetes mellitus, hypertension, gout, chronic liver disease and possibly nephrolithiasis. Normal saliva is rich in mineral content. Salivary stasis and ductal inflammation lead to precipita-

tion of mineral salts to form nidus. The nidus is progressively layered by organic and inorganic materials eventually forming a sialolith.

Sialolithiasis is usually asymptomatic. Presentations such as pain and swelling are manifested when the stone obstruct the salivary duct.³ Erosion of the mucosa into the oral cavity is rare. However in this case, the stone was large and given the limited space, erosion in this case was not unexpected.

Computed tomography (CT) imaging is a useful radiological tool especially for large stone. It provides information on the size and location, and also demonstrates the associated gland morphology. A small stone may be sufficiently shown on a contrast sialogram or even a standard mandibular occlusal radiograph.²

Treatment of a submandibular sialolith in general, depends on the size and location of the stone. It can be intraoral removal, interventional sialoendoscopic removal or resection of the gland.⁴ Extracorporeal shock wave lithotripsy and endoscopic intracorporeal shockwave lithotripsy are other alternative treatment options. This patient was treated with stone removal at the same sitting with incision and drainage of the pus. A follow up submandibulectomy is required.

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