Anterior submandibular sialolithiasis: A series of five cases

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Abstract

Submandibular gland is most often affected by the development of sialolithiasis as compared to parotid gland. Sialolithiasis accounts almost 30% of all salivary disorders and higher incidence is found in males. This article reports a series of five cases of submandibular sialolithiasis and describes their successful management in our institute.

Keywords: Extracorporeal shock wave lithotripsy (ESWL), Salivary gland, Sialolith, Sialolithiasis, Submandibular gland, Salivary gland stone.

Introduction

“Sialon” means “Saliva” and “Lithos” means “Stone”. Calculi formation within a salivary gland or its associated duct is known as “Sialolithiasis”. Almost 85% of sialolithiasis cases are of submandibular gland sialolithiasis. Young individuals and middle-aged adults are most commonly affected by salivary stones. Rarely, it affects children. Submandibular gland is most commonly affected by sialolithiasis due to its duct’s tortuous course. Etiology of sialolithiasis is unclear. Dehydration, calcium metabolism disturbances, precipitation of minerals are most likely causes for the formation of sialolithiasis. Presence of anatomical variations of salivary duct can also lead to sialolithiasis. Presence of sialolithiasis can be diagnosed by radiographic examination, ultrasound examination or sialogram. This article describes a series of five cases of anterior submandibular sialolithiasis and their management.

Case Series

We are presenting five cases of anterior mandibular sialolithiasis. All these patients were asymptomatic. On clinical examination, small swelling was seen at floor of oral cavity in the anterior region. Radiographic examination was advised to all these patients. On occlusal radiographs, radiolucent mass was seen. In all these cases, surgical excision of sialolith was performed under local anaesthesia. In all cases, longitudinal incision was taken on the mouth floor. In few cases, suture material was used as traction while excising sialolith. Fig. 1 to 5 describes clinical pictures of all these cases. Surgical closure was performed with mersilk suture and patient was recalled for follow up. Suture removal was performed when healing was noticed satisfactory. In none of the cases, recurrence was seen.

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Ultrasoundography is considered as first choice examination in diagnosing sialolithiasis. Sialo- magnetic resonance imaging is one of the recent technique for diagnosing sialolithiasis. In case of major gland sialolithiasis, small sialoliths can be managed conservatively, i.e. by massaging the gland to milk sialolith towards orifice as well as moist heat and sialogogues can be advised. Major sialoliths can be excised surgically. In cases of minor gland sialolithiasis, surgical excision is the best treatment option. Minimally invasive techniques like salivary gland endoscopy, shock wave lithotripsy are recent techniques for the management of sialolithiasis. Extracorporeal shock wave lithotripsy (ESWL) changed therapeutic approach in sialolithiasis patients.

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**Conflict of Interest**
None.

**References**


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