

https://dspace.org/

Developments in Clinical Management of Sialadenitis in Africa

Shivesh Maharaj; Nadir Kana; Zarreen Cassim

https://hdl.handle.net/10539/39718
SCOPUS

Downloaded from a DSpace repository. https://dspace.org/

Check for updates

Ear, Nose & Throat Journal
2022, Vol. 101(9) NP367–NP368
© The Author(s) 2020
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/0145561320961758
journals.sagepub.com/home/ear
SAGE

Developments in Clinical Management of Sialadenitis in Africa

Shivesh Maharaj, MBBCH, MMED, FCORL[1], Nadir Kana, MBBCH, MMED, FCORL[1], and Zarreen Cassim, BA, MA[1]

Abstract

Sialendoscopy is a relatively new technique that offers the potential to be both diagnostic and therapeutic. It follows the principle of gland sparing therapy to manage conditions such as ductal stenoses and sialolithiasis. The procedure is relatively easy to learn and more affordable than the traditional methods of intervention. It is well suited to the African continent in that the equipment is relatively portable and may be taken to peripheral and rural areas, while still providing world-class care and minimal disruption to the patients. We hereby present the evolution of sialendoscopy.

Keywords

sialendoscopy, salivary gland disease, salivary duct stenoses, salivary, stones

Within the area of salivary gland pathology, obstructive sialadenitis is the most common inflammatory condition of the salivary glands.[1] Initial treatment of sialadenitis includes hydration, anti-inflammatory medication, and antibiotics when a bacterial infection is suspected. However, when initial treatment fails, further intervention is needed. The traditional external approach is sialadenectomy. However, with this exists, the potential for injury to the lingual and facial nerves exists. Further complications including bleeding, infection, and an unsightly scar are also found with this procedure.[2,3] Sialendoscopy presents a viable alternate in resource limited environment (prevalent in Africa) and has the dual purpose of being both diagnostic and therapeutic.

The basic sialendoscopy procedure falls into three steps: the first of which involves the papillary dilation, followed by the passing of the sialendoscope, diagnosis, and lastly, the treatment of the obstruction. The papilla is more readily located using a microscope or magnifying loupes.

The "classic technique" to dilate the papilla is with the use of salivary probes. These are similar to lacrimal dilators. A conical dilator that is less traumatic to the ductal lumen can also be used instead of salivary probes. This is possible only when the papilla opening is large and clearly visible.

The "guided puncture technique" begins with the introduction of probes of increasing size followed by a guidewire. A conical dilator is "railroaded" over this guide to expand the papilla. The dilatator is then removed and the endoscope working channel is once again "railroaded" over the guidewire.

In cases where the submandibular duct papilla is difficult to find, a more invasive "surgical" technique can be useful. An incision is made parallel to the course of the duct. The duct is then identified and incised by 1 mm to allow the insertion of the endoscope. In terms of the location of stones, for mobile stones less than 5 mm located in the distal duct/papilla, sialendoscopy with calculus retrieval via stone basket may be attempted. If located in the proximal duct/hilum, in the case of small, mobile calculi less than 5 mm, retrieval of the calculus with a wire basket or grasping forceps is indicated. In the case of calculi that are greater than 7 mm which are palpable, the stones can be fragmented using laser, lithotripsy or a transoral incision of the duct can be performed. Intraparenchymal, mobile stones less than 7 mm can be removed using the sialendoscope. With impacted calculi greater than

[1] Department of Otorhinolaryngology, University of the Witwatersrand, Johannesburg, Gauteng, South Africa

Received: June 21, 2020; revised: August 31, 2020; accepted: September 04, 2020

Corresponding Author:
Shivesh Maharaj, MBBCH, MMED, FCORL, Department of Otorhinolaryngology, University of the Witwatersrand, Johannesburg, Gauteng, South Africa.
Email: shivesh.maharaj@wits.ac.za

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (https://creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (https://us.sagepub.com/en-us/nam/open-access-at-sage).

7 mm up to 10 mm, fragmentation is recommended, thus allowing for endoscopic removal.

The success rates of sialendoscopy in South Africa vary between 50% and 90% which is in line with the international literature.[4] Sialendoscopy is a relatively inexpensive, portable, and easy to learn modality that has a lower morbidity compared to traditional open salivary gland surgery. It may be performed under local anesthetic, and in a resource-limited setting, it should be incorporated into clinical care algorithms to provide better patient care.[5]

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Shivesh Maharaj https://orcid.org/0000-0002-2118-2400

References

1. Strychowsky JE, Sommer DD, Gupta MK, Cohen N, Nahlieli O. Sialendoscopy for the management of obstructive salivary gland disease: a systematic review and meta-analysis. *Arch Otolaryngol Head Neck Surg*. 2012;138(6):541-547.
2. Kroll T, Finkensieper M, Sharma SJ, Guntinas-Lichius O, Wit-tekindt C. Short-term outcome and patient satisfaction after sialendoscopy. *Eur Arch Otorhinolaryngol*. 2013;270(11):2939-2945.
3. Marchal F, Dulguerov P. Sialolithiasis management: the state of the art. *Arch Otolaryngol Head Neck Surg*. 2003;129:951-956.
4. Singh PP, Gupta V. Sialendoscopy: introduction, indications and technique. *Indian J Otolaryngol Head Neck Surg*. 2014;66:74-78.
5. Nahlieli O. Complications of sialendoscopy: personal experience, literature analysis, and suggestions. *J Oral Maxillofac Surg*. 2015; 73(1):75-80.