Use of chalazion clamp for minor salivary gland biopsy in the diagnosis of Sjögren's syndrome

ABSTRACT

Minor salivary gland biopsy is essential for the diagnosis of Sjögren's syndrome. The authors demonstrate the use of chalazion clamp to facilitate this procedure. Chalazion clamp retains the lip mucosal bleeding and exposes the salivary glands more easily for their dissection and excision individually, which facilitates the removal of various glands to histopathological examination. **Keywords**: Sjögren's syndrome, biopsy, chalazion, surgical instruments, minor salivary glands.

INTRODUCTION

Surgical procedures in the oral cavity, even small ones, present heavy bleeding and difficult access, which makes necessary the help of an assistant. The authors present the use of chalazion clamp to facilitate the accomplishment of minor surgical procedures in the oral cavity in daily practice, particular the minor salivary gland biopsy to assist in the Sjogren's syndrome diagnosis.

OBJECTIVE

Our proposal is to demonstrate the technique of minor salivary gland biopsy with the aid of chalazion clamp.

METHOD

The biopsy should be performed on the lower labial mucosa, right or left, in the middle portion between the lower gingival sulcus and the vermilion border of the lips, and between the midline and the labial commissure.¹

- 1. Mental nerve block by infiltration on lower gingival sulcus at the side that will be biopsied;
- 2. Placement of chalazion clamp at the site to be performed the procedure (Figure 1);
- 3. Horizontal incision of approximately 1 cm in the mucosa only;
- 4. Dissection and removal with tweezers and scissors of minor salivary glands in numbers of 4 to 7 (Figures 2 and 3);
- 5. Sutured with 5-0 catgut.

DISCUSSION

Dermatologic procedures in the oral cavity, though small, require the presence of an assistant to their achievement. In 1970, Garcia and Davis² demonstrated the use of chalazion clamp to assist small dermatological procedures in the dermatologist's daily practice. Since then, this "great help" was no longer mentioned in the literature for these procedures, and many physicians do not use it by forgetfulness or lack of habit.

Sjögren's syndrome is characterized by keratoconjunctivitis sicca, xerostomia associated with immune-mesenquimal condition or other systemic disease. Biopsy of labial salivary gland is important for the diagnosis.³⁻⁵ Typically, there is a dense lymphocytic infiltrate with many plasma cells and a small number of histiocytes aggregated into small focos.³

Surgery technique report

Authors:

Dalva Regina Neto Pimentel¹
Marilda Aparecida Milanez
Morgado de Abreu²
Cleonice Hirata³
Maurício Mota de Avelar
Alchorne⁴
Luc Louis Maurice Weckx⁵

¹Master in Dermatologist - PhD student, Universidade Federal de Medicina – Unifesp ²Master in Dermatologist - PhD student, Universidade Federal de Medicina – Unifesp ³PhD – otorhinolaringologist ⁴Associate Professor - Professor of Dermatology, Universidade Nove de Julho - UNINOVE ⁵Full Professor, Department of Otorhinolaryngology and Stomatology, Universidade Federal de São Paulo - Escola Paulista de Medicina - Head of the Stomatology Clinic, Universidade Federal de São

Correspondence to:

Rua Com. Miguel Calfat, 128 – Cj. 1106 São Paulo CEP: 04537-080

Submitted on: 06/18/2009 Approved on: 08/30/2009 We declare no conflict of interest.



Figura 1 – Placement of chalazion clamp at the lower lip mucosa.



Figura 2 – Dissection of minor salivary gland. Note the isolated gland at the clamp and the absence of bleeding.



Figura 3 – Incision closure; individual glands in gauze for histopathological analysis.

With this technique described by Daniels,¹ glands are dissected and removed separately, providing an adequate number of glands for histopathologic analysis, with less chance of damaging the labial sensitive vessels and nerves. With the use of chalazion clamp, the bleeding is contained by the pressure supplied by the clamp lower plate and upper loop. The salivary glands are more exposed and easily dissected, providing the appropriate number of glands for histopathologic study.

CONCLUSION

The chalazion clamp should be an ever present device in a dermatologist surgical material.

REFERENCES

- Daniels TE. Labial salivary glan biopsy in Sjögren's syndrome. Asthritis and Rheumatism 1984;27(2):147-156.
- Garcia RL, Davis CM. Chalazion clamp for dermatological surgery. Arch Dermatol 1970;102(6):693.
- Chisholm DM, Mason DK. Labial salivary gland biopsy in Sjögren's disease. J Clin Pathol 1968;21:656-660.
- Tarpley TM, Anderson LG, White CL. Minor salivary gland involvement in Siögren syndrome. Oral Surg 1974;37:64-74.
- Bertram U, Hjorting-Hansen E. Punch-biopsy of minor salivary glands in the diagnosis of Sjögren's syndrome. Scand J Dent Res 1970;78:295-300.