

## Adenomatous oncocytic hyperplasia of labial minor salivary gland duct: age-related or treatment-induced change?

ADRIANA HANDRA-LUCA<sup>1,2)</sup>

<sup>1)</sup>L'Assistance Publique–Hôpitaux de Paris (AP–HP) Groupement Hospitalier Universitaire (GHU), Hôpital Avicenne, Bobigny, France

<sup>2)</sup>Unité de Formation et de Recherche Santé, Médecine et Biologie Humaine (UFR SMBH), Université Paris Nord, Bobigny, France

TO THE EDITOR

Sir,

Oncocytic hyperplasia of the minor salivary glands had been defined as a well-described entity in the 90s by Takeda [1, 2]. Etiopathogenic relations to duct obstruction and inflammation, mitochondriopathy, ischemia (nicotine-related or not), increased age and/or ethanol have been proposed [3, 4]. We would like to draw attention on another possible relation, that to corticoid and/or Mycophenolate mofetil treatment.

We have recently identified on a labial minor salivary gland biopsy, oncocytic hyperplasia of an interlobular salivary gland duct. The labial biopsy was performed for dry syndrome occurring one year after corticoid, Mycophenolate mofetil and Azathioprine treatments (non-specific interstitial pneumonia). The glandular tissue showed mild, fibro-inflammatory sialadenitis. The oncocytic hyperplastic lesions, extending to over half the circumference of the duct and obstructing the duct, were seen on six serial-sections. They consisted in an increase of the number of suprabasal cells. These cells showed a decreased nuclear/cytoplasm ratio, mild atypia and anisocytosis. Nucleoli were inconspicuous. Basal cells were scarce or absent. Gland-type, tubular cavities, suggestive of an adenomatous change, were formed in the thickness of the hyperplastic epithelium, without a Periodic acid–Schiff (PAS)-positive surrounding basement membrane (Figure 1).

Oncocytic metaplasia or oncocytosis is reported more frequently in male patients, in the parotid glands [1]. Besides the age (71 years old), corticoid treatment could have resulted in the ductal oncocytic metaplasia we have observed [5]. Mycophenolate mofetil may also be incriminated in the genesis of these lesions, a case of adrenal carcinoma with oncocytic change being reported after post-transplant immunosuppressive treatment [6].

In conclusion, the etiopathogenesis of salivary gland duct oncocytic metaplasia is complex. Besides well-known factors, corticoid and Mycophenolate mofetil treatments may be involved. Further studies are required for investigation the relevance of the development of an adenomatous pattern in hyperplastic oncocytic metaplasia lesions, whether preneoplastic or not.

### References

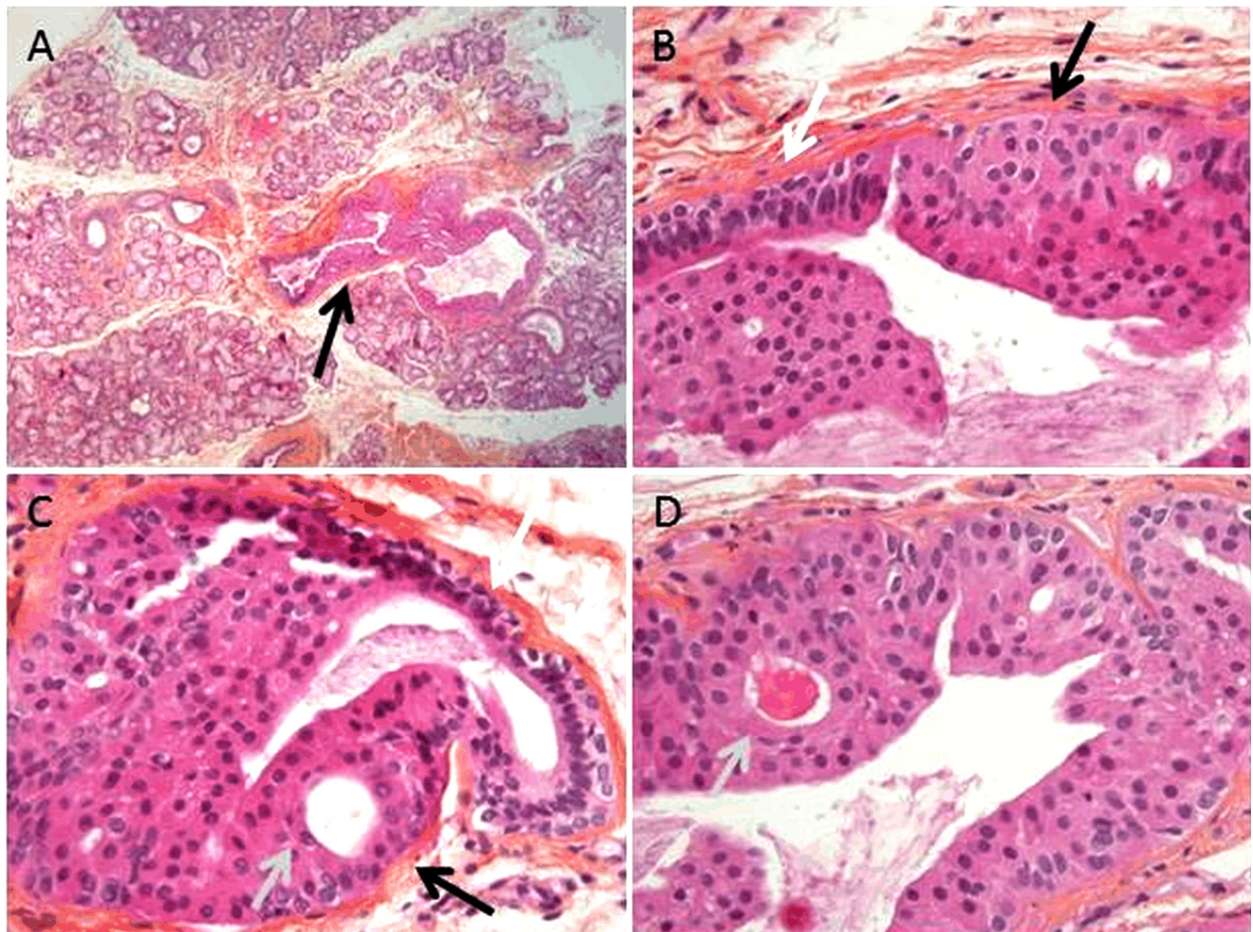
- [1] Takeda Y. Oncocytic hyperplasia in the human minor salivary glands: a post-mortem study. *Virchows Arch A Pathol Anat Histo-pathol*, 1993, 423(2):105–109.
- [2] Takeda Y, Yamamoto H. Epithelial hyperplasia of the extra-glandular excretory ducts of human minor salivary glands: a histopathologic study. *J Nihon Univ Sch Dent*, 1997, 39(3):147–153.
- [3] Sanmann F, Putzke HP. [Focal oncocytosis of the salivary glands and etiopathogenetic relations]. *Mund Kiefer Gesichtschir*, 1997, 1(2):86–89.
- [4] Banderas JA, Gaitan LA, Portilla J, Aguirre A. Effects of chronic ethanol consumption on the rat parotid gland. *Arch Oral Biol*, 1992, 37(1):69–72.
- [5] Du J, Wang Y, Hunter R, Wei Y, Blumenthal R, Falke C, Khairova R, Zhou R, Yuan P, Machado-Vieira R, McEwen BS, Manji HK. Dynamic regulation of mitochondrial function by glucocorticoids. *Proc Natl Acad Sci U S A*, 2009, 106(9):3543–3548.
- [6] Lo Monte AI, Palumbo VD, Damiano G, Maione C, Florena AM, Gioviale MC, Spinelli G, Bellavia M, Cacciabauda F, Buscemi G. Double endocrine neoplasia in a renal transplant recipient: case report and review of the literature. *Transplant Proc*, 2011, 43(4):1201–1205.

### Corresponding author

Adriana Handra-Luca, MD, PhD, Service d'Anatomie Pathologique, AP–HP GHU Avicenne, Université Paris Nord Sorbonne Cité, 125 rue Stalingrad, 93009 Bobigny, France; Phone 0033 148955555 deck 52047, secretariat 55601, Fax 0033 14895555602/5480, e-mails: [adriana.handra-luca@aphp.fr](mailto:adriana.handra-luca@aphp.fr), [adriana.handra-luca@hotmail.com](mailto:adriana.handra-luca@hotmail.com)

Received: May 30, 2018

Accepted: July 27, 2018



**Figure 1 – The lesions of hyperplastic oncocytic metaplasia obstructed partially the interlobular salivary duct (A, black arrow). These lesions consisted in a pluristatified epithelium composed of an increased number of oncocytic suprabasal cells (B and C, black arrow). Basal cells were identified only in the adjacent ductal epithelium (B and C, white arrow). Gland-like cavities were observed in the hyperplastic oncocytic metaplasia epithelium, not surrounded by a basement membrane (C and D, gray arrow). Hematoxylin–Eosin staining: (A)  $\times 50$ ; (B–D)  $\times 400$ .**