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Letter to the Editor

Letter to the editor concerning Valstar et al.
[Radiother Oncol 2020 Sep 23;S0167-8140(20)30809-4. doi: 10.1016/j.radonc.2020.09.034]



Dear editor,

We read the paper of Valstar et al. [1] on the discovery of the tubarial salivary glands with great interest. The authors discovered a pair of previously overlooked, clinically relevant macroscopic glands. We agree with the authors that these glands potentially may play an important role with regard to the efficient working and protection of the nasopharyngeal and oropharyngeal mucosa, comparable to the role of saliva for the oral cavity [2]. It is known that treatment of head and neck cancer with radiotherapy might result in swallowing problems [3]. This points towards damage of structures lubricating the nasopharyngeal and oropharyngeal mucosa. The so-called tubarial salivary glands may play an important in this lubricating process. This can be deduced from the observation that a lower cumulative radiation dose to these glands is accompanied by less swallowing problems [1].

We do not support, however, to yet call these tubarial glands, salivary glands. First, saliva is a slightly alkaline secretion of water, salts and proteins such as mucins, agglutinin, lactoferrin, lysozyme and amylase that is secreted into the mouth by salivary glands [4]. Dawes [5] showed that while saliva enters the mouth at several locations, the different secretions are hardly mixed. In this respect, tubarial glands should not be considered salivary glands as they do not contribute to the oral fluid, but at best ectopic salivary glands when they indeed secrete a fluid with a composition comparable to saliva [6]. Second, the histopathology points towards a conglomerate of minor glands rather than a major gland. Major glands have a main excretory duct and not multiple macroscopically visible draining duct openings, although the sublingual gland has some macroscopically visible draining ducts in addition. The duct openings macroscopically shown in their paper more resemble the duct endings of e.g., the labial glands. Third, salivary gland glands are known to secrete amylase. The discovered glands, however, were negative for amylase. Therefore, we would have expected that other salivary markers would have been tested in addition. As the histopathology of the discovered glands has a high resemblance with sublingual and minor salivary gland tissue, agglutinin, lactoferrin and lysozyme could have been used to better proof whether the glands indeed should be considered to be salivary glands [7–9]. Fourth, it is not yet known on what stimuli these glands react to start secretion. Are this, e.g., chewing, gustatory or olfactory stimuli? These are the common stimuli for salivary glands. Fifth, it would be important to collect secretions of the tubarial glands to unravel its composition to be able to gain a better insight in the potential functions of the secreted fluid. Collection of such secretion presumably is possible when

endoscopically inspecting the nasopharynx with methods used to study minor salivary gland secretions.

Resuming, the tubarial glands presumably exert an important function in the nasopharynx and oropharynx, but it is too early to name these glands, ectopic salivary glands.

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