

## Radioanatomy of Salivary Glands

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Abstract Original Research Article

Salivary glands are the first organs of digestion secreting their digestive juices into the oral cavity. Parotid, submandibular, and sublingual glands are the major paired salivary glands in the decreasing order of their size. In addition, multiple small minor salivary glands are noted randomly distributed in the upper aerodigestive tract, including paranasal sinuses and parapharyngeal spaces. The imaging is directed to the major salivary glands. Commonly used imaging methods include plain radiography and conventional sialography. Recently, high-resolution ultrasonography (HRUS) is being increasingly used for targeted salivary gland imaging. However, the advent of cross-sectional imaging techniques such as computed tomography (CT) and magnetic resonance imaging (MRI) have revolutionized the imaging of salivary glands. This article illustrates the role of imaging in evaluating the variegated disease pattern of the major salivary glands.

**Keywords:** Computed tomography, imaging, magnetic resonance imaging, salivary glands.

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### INTRODUCTION

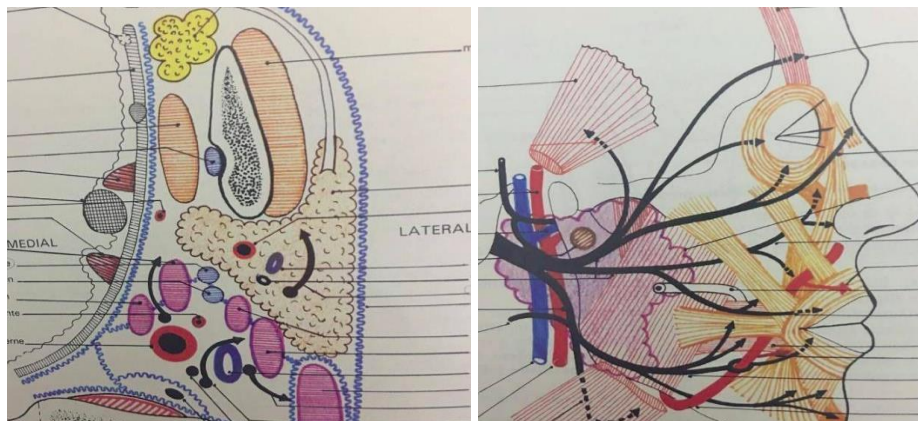
Salivary glands are the first organs of digestion secreting their digestive juices into the oral cavity. Parotid, submandibular, and sublingual glands are the major paired salivary glands. In addition, multiple small minor salivary glands are noted randomly distributed in the oral cavity and in the upper aerodigestive tract.

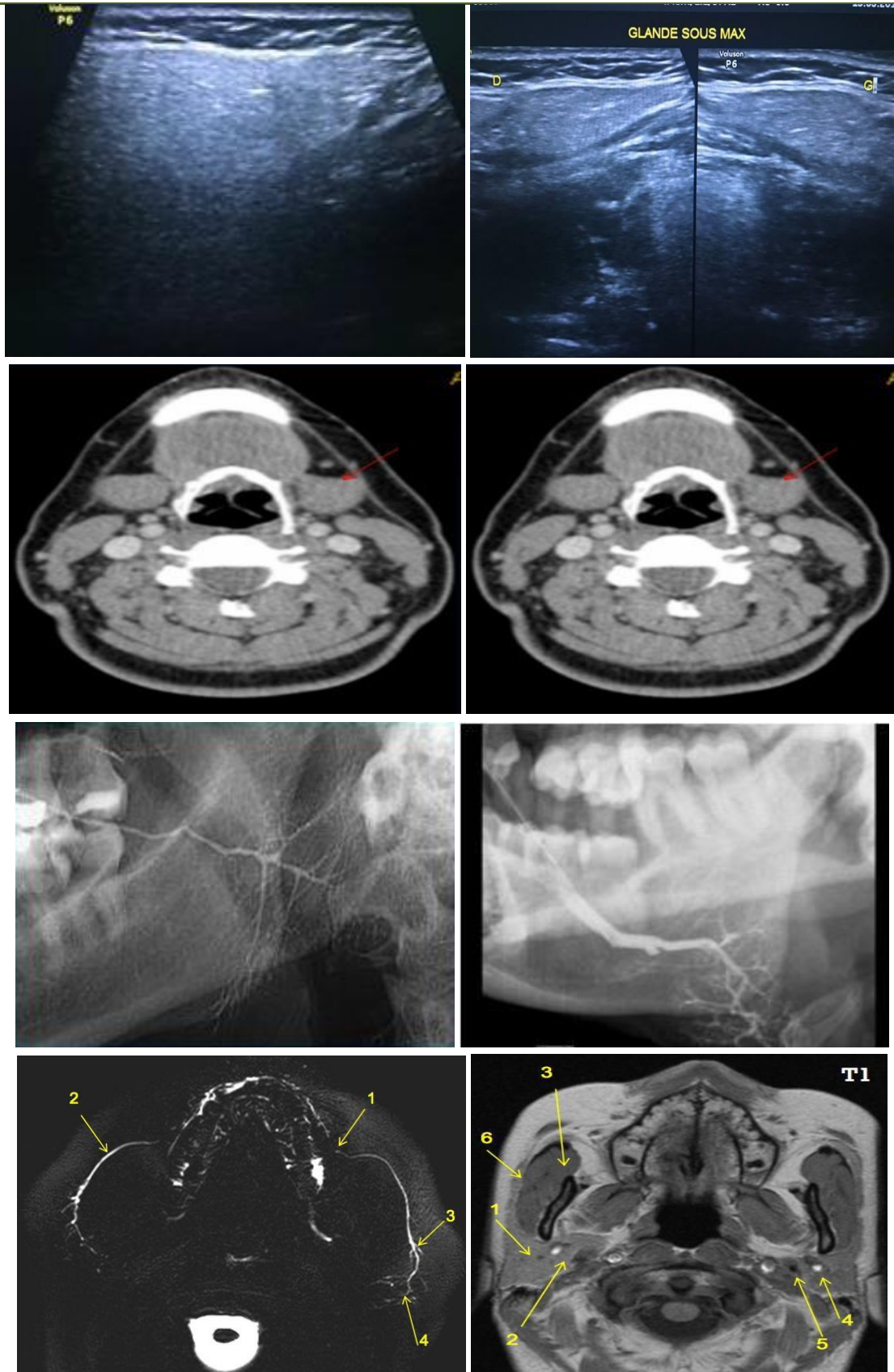
They are subject to various and varied pathologies thus constituting a rather frequent reason for consultation. The purpose of this work is to illustrate the anatomical bases and normal radioanatomy of the salivary glands.

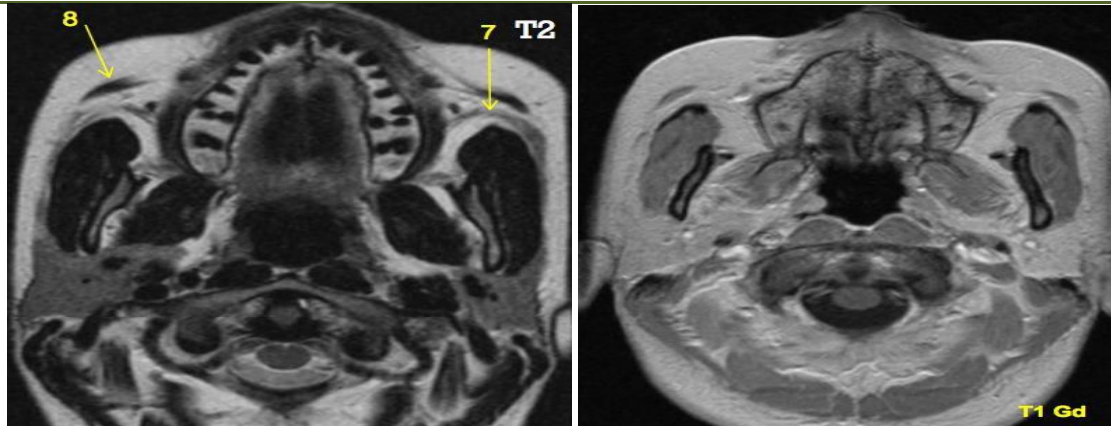
### ANATOMICAL OVERVIEW:

The salivary glands are subdivided into:

- Major glands: they are pairs, placed on the lower part of the face and represented by the parotid, submandibular and sublingual glands.
- Accessory glands distributed throughout the oral cavity and in the upper aerodigestive tract. They are represented by the labial glands, and palatal and palatal glands. In this work, we will focus on the major salivary glands, the accessory glands are only concerned with imaging to assess the deep infiltration of palatal and jugal tumors.







### MEANS OF EXPLORATION AND NORMAL RADIOANATOMY:

The variability of the anatomical structures of the petrous pyramid is studied by medical imaging.

Computed tomography is the most frequently used technique, both to make the diagnosis and to choose the best surgical approach. Magnetic resonance imaging is used in the detection of retrocochlear and intracranial pathologies. It allows the complementary evaluation of the liquid spaces of the inner ear as well as their freedom.

### CONCLUSION

A variety of disease patterns involve the major salivary glands with few characteristic features on

imaging. Ultrasonography should be the first screening imaging tool followed by sialography, if required. CT is the mainstay of imaging in sialolithiasis while MRI is more optimal for neoplastic processes with associated invasion.

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