

VALUE OF SIALOGRAPHY AND ULTRASONOGRAPHY IN THE DIAGNOSIS OF SALIVARY GLAND DISEASES

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Disorders of major salivary glands are relatively common and the most appropriate investigation for such disorders is often decided by the presenting symptoms of the patient. Sialography still is the most widely used radiographic method for examination of major salivary glands. Inflammatory and non-neoplastic diseases generally show changes in the ductal system. In many instances their clinical pictures are similar. However their sialographic images exhibit sufficient characteristic information for the clinician to arrive at a diagnosis.

Ultrasonography is also one of the imaging methods used for examination of major salivary glands. The main application of ultrasonography in the diagnosis of major salivary gland disease is for differentiation of cystic or fluid-containing lesions from solid masses. Solid tumours larger than 5mm are readily visualized by ultrasonography because they are less echogenic than the surrounding normal salivary parenchyma. Fine needle aspiration biopsy also can be guided by ultrasonography in the diagnosis of salivary gland pathology.

The aim of the study was to compare the diagnostic outcome of sialography and ultrasonography. A total of 29 patients referred to Division of Radiology for diagnostic sialography were included in this study. Of these 21 (72.4 %) had parotid salivary gland lesions and 8 (27.6 %) had submandibular salivary gland lesions. Having obtained informed consent, all patients were subjected to ultrasonography prior to sialography. The diagnostic outcome of the two techniques was compared.

Eighteen patients (62.1 %) gave positive results for both sialography and ultrasonography investigations whereas 37.9 % of the patients did not. Each of these imaging procedures has its own value in the diagnosis of salivary gland diseases. But, ultrasonography being inexpensive, harmless and noninvasive technique could be used in combination with sialography to refine the diagnosis.