



E D J

EGYPTIAN DENTAL JOURNAL

July 1994
Volume 40 No. 3

DIAGNOSTIC IMAGING MODALITIES IN PAROTID GLAND ENLARGEMENT

Zeinab Abd El-Salam Abd El-Latif *

ABSTRACT

Twenty patients with various parotid gland enlargement were selected from outpatient dental clinic. The classical sign of the parotid enlargement is swelling which may be localized as inflammatory, cystic, neoplastic or associated with systemic diseases as diabetes mellitus, sjogren's syndrome and may occur after ingestion of certain drugs or metals. These heterogeneous pathological swellings have great morphological variation that need various diagnostic imaging modalities to be visualized. The favoured modality has been evolved from plain radiography, to sialography, scintigraphy, ultrasonography and to computed tomography. The application and limitation of each modality were presented.

Review of Literatures :

The superficial location of the parotid gland lesions make them well suited for diagnosis by means of sialography, scintigraphy, ultrasonography and computed tomography (C.T.) while the deep lesions can be only visualized by computed tomography and magnetic resonance image (Maravilla et al., 1985 & Armillota et al., 1986).

Blair, 1976 mentioned the causes of the parotid gland enlargement, the first cause is inflammation which is either acute as (mumps) or chronic either obstructive (stone-calculi) or non obstructive (sjogren's syndrome or recurrent parotitis). The second cause is neoplasms

either benign or malignant. Also Systemic diseases may cause indirectly asymptomatic enlargement of the parotid glands as diabetes mellitus (Russoto, 1981).

Conventional plain radiography was limited in diagnosis the stone in the stenson's duct by using occlusal film that held extraorally while the cheek is puffing out (Blair, 1976).

Sialography provide a simple method for radiographic examination of the salivary gland diseases after intra-ductal injection of a contrast media (Blatt et al., 1956). It is an important technique for visualization the morphology of the ductal system of the gland and estimation its function. It is indicated in chronic inflam-

* Ass. Prof. in Oral Radiology Department, Faculty of Oral and Dental Medicine, Cairo University.