INTRODUCTION & AIM OF THE WORK

Introduction

The paranasal sinuses are air-filled cavities situated within the bones of the skull which surround the nasal cavity. The main pathological changes affecting this sinonasal region are inflammatory and neoplastic. The chief symptoms are headache and pain which are not diagnostic. Moreover, the clinical examination can visualize only a small part of the nasal cavity. So, the radiological examination plays a very important role in the diagnosis of the pathological lesions affecting this area.

Plain radiography of the sinuses is being replaced by CT as more physicians begin to recognize the general inaccuracy of sinus radiographs even with the most skilled interpretation. CT has become the standard for imaging of sinonasal pathological changes (Willing, 1995).

Polytomography has been largely replaced by CT because of its better image definition and reduced radiation exposure. Moreover, CT can show early bony affection and extension of soft tissue tumours. High resolution CT by taking the advantage of different inherent attenuation values among mucoid secretions, inflammed tissues and tumours provides an essential information about the extent of the disease, operability of the patient, the surgical procedure to be done as well as accurate follow-up of the response to radiation and chemotherapy (Som, 1989).

CT scanning of the sinonasal area will allow evaluation of the fine bony details and osseous tumours. Also, the intracranial extension of these neoplasms which can be extensive and not appreciated on endoscopic examination can be accurately mapped out by CT (James et al., 1993).

Aim of The Work

The aim of this study is to demonstrate the role of high resolution CT in diagnosing the different pathological changes of the sinonasal region. This will be achieved by reviewing literature and the recent issued studies concerning our subject together with presentation of some illustrative cases.