Invistigations of themaxillary sinus in cases of primary atrophic rhinitis

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Frimary atrophio rhinitis is not unoommon in Egyptit is a ohronio inflammation of the nasal muoosaoharaoterised by roomy nasal fossae, visoid seoretionwhioh rapidly dries and forms orusts whioh emit aoharaoteristio foul odour.The exaot aetiology of the disease is not yet wellestablished, some attributed it to hereditary, poornutrition or endoorinal faotors, and others due to ohronioinfeotion in maxillary sinus in ohildhood.It appears about puberty and more oommon in females.In this study 30 patients with primary atrophio rhinitiswere examined. Patients with atrophio stage of rhinoscleroma were exo luded.Examination of the sinus was done by sinosoope through oanine fossa.For eaoh patient histopathological and baoteriologioalexaminations were done for both nose and maxillary sinus, oneach side, to evaluate the condition of maxillary sinusin oase of primary atrophic rhinitis.Sinosoopioally we saw no ohange of maxillary sinusappearance in early oases of primary atrophio rhinitiswhile when nasal manifestations were advanced, atrophicohanges of maxillary sinus lining mucosa became visiblespecially around its ostium with impairing its oiliary fu~t~n.We oould olassify histopathologioal ohanges in noseinto three grades according to duration of affeotion.In the first grade, the nasal muoosa is oontainingmore inflammatory calls with diminution of number of muoussecreting glands, while maxillary sinus mucosa appears normal.In the second grade the nasal mucosa shows patohYsqumous metaplasia, on the oontrary the sinus muoosa showsoompensatory hyperplasia of glands.Lastly in the third grade when the disease is advancedboth nasal and maxillary sinus mUOosa show the same atrophicohanges whioh were stratified squmous metaplasia withkeratinization and loss of oilia, also there were loss ofgoblet oells and mucous glands with atrophy of laminapropria.Baoteriologically we found no relationship betweenatrophio ohanges in nose or sinus and the type of organismisolated from eaoh.Henoe histopathologioal examination of tissue isreoommended for every case diagnosed as atrophio rhinitisto oonfirm the diagnosis and determine the condition ofthe maxillary sinus.X-ray of the maxillary sinuses showed that 80% of theoases were opaque radiologically while the remaining 20%were olear. The dimentions of the maxillary sinuses werefound to be reduced in about 53% of the cases. In thosecases the lateral wall of the nose as well as the otherwalls of the sinus were thiokened. The outlines of thesinuses were olearly demarcated.By sinosoopical examination there was no suppurationin almost all the 08ses.So, X-ray pioture of paranasal sinuses as a diagnosisfor ohronio sinusitis in a patient with primar,y atrophiorhinitis

is of DO aotual value as there is already opaoitydue to thiokness of the walls of the sinuses.