## INTRODUCTION

The ventilation of the maxillary sinus is of great importance for its function in health and disease. Different tests have been used experimentally as well as in clinical studies, in order to judge the patency of the maxillary ostium and pressure in the maxillary sinus.

The first study was published by Braune and Cosen (1877) they studied the pressure variations with a water manometer within the sinus on autopsy specimens.

Simultaneous recording of the ipsilateral nasal pressure changes was added to this method by Proetz (1932). Experiments were also performed by Drettner (1965a) on models similar to that used by Proetz (1932), he measured nasal and maxillary sinus pressure variations in a series of 36 sinuses with chronic maxillary sinusitis and found that, the ostium was closed in all cases.

Drettner (1965b) found that the mean pressure needed to force the ostium to open with saline solution was 800

mmH2O in 30 cases with chronic sinusitis . Similar results were obtained by Zippel and Meier ( 1968 ) Rantner (1974 ) .