

affected side may elicit pain, and in some cases where actual absorption of bone tissue has taken place crackling may be felt.

(b) Succussion, as suggested by Frontis, is only of value where the pus is rather fluid and the antrum contains air.

(c) Redness of the gums on the affected side has been observed by McBride. This was noticeable in two of my cases.

(d) Examination of the mouth may prove the existence of defective and sensitive teeth, and in some cases—it occurred in two of mine—a small sinus is observed either in the centre of or above the alveolar ridge, and from the mouth of this pus may be seen to exude. A probe passed into the sinus will detect carious bone and sometimes enter the antrum.

Actual opening on the side of the face, close to the nasal bone, and communicating directly with the antrum, I have seen in two cases. This condition, so far as I have been able to ascertain from the literature on the subject, is not mentioned even in the so-called classic works on rhinology. This condition of itself would be positive evidence of the previously existing empyæma.

(e) *Exploratory Puncture*.—This may be carried out by thrusting a strong trocar through the outer wall of the maxillary sinus about the centre of the canine fossa, or by means of a suitably curved one an entrance may be effected through its inner wall just behind the anterior extremity of the inferior turbinated bone. Aspiration of the antrum through the ostium maxillare, as suggested by Hartmann, is a difficult and at the same time an uncertain method.

These last-named measures should only be used if there were any doubt as to the existence of an empyæma, and where the teeth on the affected side were sound; but should there be defective teeth, then the first upper molar should be selected, and through its posterior socket a drill be made to penetrate into the antrum.

Finally, trans-illumination, as first suggested by the late Voltolini and Cossolino, may prove a further means of corroborative evidence. This method is carried out as follows:—The room in which the patient is must be absolutely dark.