

can usually be found, by the help of a probe, attached to the vomer or turbinated bodies. There is ulceration also, in place of the healthy appearance present in simple empyæma.

Empyæma of the frontal sinus without closure of the fronto-nasal duct is so rare that it may be excluded.

In disease of the anterior ethmoid cells the pus appears above the middle turbinated body instead of below. It may, however, be associated with empyæma of the antrum.

Empyæma of the sphenoidal sinus or of the posterior ethmoidal cells is very rare; the pus is discharged into the post-nasal space.

Prognosis. These cases are seldom fatal. Rare instances have occurred, where extension has taken place through the neighboring sinuses into the cranial cavity, and death resulted from cerebral abscesses or meningitis. Septicæmia has been known to arise from empyæma of the antrum. Spontaneous resolution has been observed in one of my cases. Where the cause is in the nose the treatment is likely to be prolonged, as compared with those due to caries of the teeth. Sometimes pus continues to be formed in spite of perfect drainage, and the use of antiseptic solutions.

Treatment. The treatment of this disease has given rise to as much controversy and divergence of opinion as the ætiology. One may choose between the ostium and an artificial opening for treating and draining the cavity. If an artificial opening is decided upon there are three ways; through the nose, through the alveolus of a tooth, or through the canine fossa. It is almost unnecessary to discuss the choice between the natural and artificial opening. Michel advocates washing the cavity through the ostium, or opens it if closed; but these methods are quite impracticable. It is also recommended to remove the middle turbinated in order to reach the ostium easily, but this also is unjustifiable. As to whether the opening should be made through the nose, through an alveolus or through the canine fossa, there may well be difference of opinion. The first, through the nose, has been styled the German method, because first proposed by Mikuliez in 1887 and practiced chiefly by his fellow-countrymen. Mikuliez devised a special spear-shaped knife for the purpose,