

In all cases there is a certain amount of prostration and indisposition to exertion. Such symptoms as chills, vertigo, nausea, vomiting and sweating point to probable intracranial complications. The general appearance of the patient is not characteristic, and gives us no hint, except that, in cases of long standing, a typhoid or septic aspect is sometimes seen.

The appearance of the mastoid region may be perfectly normal. Swelling and edema over the bone point to mastoid disease, especially when it occurs some time after the onset. It may, however, be due to swollen glands, otitis externa, or to periauricular phlegmon as the result of an invaded cartilage. The swelling caused by adenitis here is never extensive, is superficial and not especially painful. That of otitis externa is superficial and usually obliterates the post auricular furrow; besides there is generally marked swelling in front of the tragus, as the lymphatics from the external ear empty into these parts. Movement of the auricle, pressure in the canal with the finger tip, or pressure in front of the tragus is very painful in furuncular conditions.

The subperiosteal abscess of mastoiditis, on the other hand, is deeply situated, and does not as a rule obliterate the post auricular furrow, the auricle being pushed out as a whole from the head.

Pain on deep pressure over the mastoid bone is one of the most constant and important signs of mastoiditis. It is beginning of an attack it is usually most severe over the area of the antrum and from here radiates into the tip. It may be general over the whole bone and posterior to it, or extend down into the neck.

In eliciting this sign, care must be taken to compare both sides, a good plan being to place a hand on each mastoid and to press alternately, meanwhile watching the face of the patient for signs of distress. In nervous patients and children it is well to divert their attention in some manner during the examination.

Pain on pressure over the antrum occurs frequently in cases of middle ear trouble, for there is no doubt that the mastoid antrum is infected in the vast majority of middle ear suppurations. The pain of mastoiditis, is not only found here, but is often most severe in the tip of the bone, and radiates to the parts below and posterior to it. Pain can sometimes be traced in a line posterior to the antrum area and is due to infection of the line of cells that run in this direction.

In bones of a cellular character, the so-called "pneumatic