

when the diagnosis has been otherwise doubtful. Certainly one meets with many cases of caries in which no rise of temperature can be detected, but upon more extended observation in this matter I have no doubt very valuable statistics may eventually be obtained.

Then, again, as regards RIGIDITY, there is usually more or less rigidity of the spine in the neighborhood of the disease, and this is an important symptom in the early stages of caries. It is the result chiefly of muscular spasm from reflex action, or voluntary muscular action to prevent pain, but may also occur from the exudation of the products of inflammation. Rigidity in caries of the spine is not, however, so clearly defined as it is in cases of inflammation of the more movable joints, as the hip and knee, and in many cases it cannot be very clearly detected. If the disease be situated in the lower dorsal or in the lumbar vertebræ, causing slight posterior projection in these regions, it may be a question whether the projection is the result of posterior curvature from weakness of the ligaments of the spine or from caries. Under such circumstances the presence or absence of rigidity should be determined. The patient should be placed in the prone position, when, if the case is one of weakness only, the projection disappears, whereas, if inflammation exists, the projection remains more or less.

Careful elevation of the legs, while the patient lies in the prone position, will intensify this result. Movements in other directions will also generally be found limited as a consequence of the rigidity when caries is present.

In cervical disease the rigidity shows itself in stiffness of the neck muscles, and this often affects the head, laterally producing wry-neck. There is usually a great difference between wry-neck from caries and that from permanent muscular contraction. In the latter it will probably

have existed for a long time, and there will be little or no pain, or at least of a less distressing nature; there will be firm and unalterable contraction of the sterno-mastoid alone, and the face may be atrophied on the depressed side and the features distorted. In caries, other muscles as well as the sterno-mastoid will probably be affected, and the head will be held in a manner more expressive of pain, and support of the head will relieve the contraction and the pain to some extent.

In simple torticollis the movements of the head are only restricted in one direction; in caries the head is kept in one position, but not commonly restricted in any if carefully handled, because, in torticollis from caries, movements in any direction are painful, whereas in true torticollis, pain, if any, only occurs from movement in one direction. Rest in bed for a few days will often relieve the torticollis of caries.

In the latter affection there may be a condition of spasm in the contracted muscles, and in adults it may be difficult to distinguish between this disease and "spasmodic torticollis." I have known torticollis having all the characteristics of the simple affection to exist in a child for many months before it was recognized as a symptom of disease of the bones. Inflammation of lymphatic glands of the neck alone may produce torticollis, and this may be very difficult to distinguish in its early stages. In caries of the cervical vertebræ there may, however, be very free movement.

In caries occurring in the dorsal or lumbar regions, rigidity may be observed in the psoas muscles (or in one psoas only), being perhaps associated with psoas abscess, and this may produce lordosis instead of posterior projection. Such cases must be distinguished from simple local inflammation of psoas muscles, which is not always very easy; however, the latter condition is rare.