

This is no doubt very much more common in all tubercular disease than is supposed, as autopsies made on persons dying from violence and other causes go to prove.

In my own experience I have at different times seen cases where there was every symptom of tubercular disease of the hip-joint present, too, for a considerable time, entirely recover in the course of a few weeks or months of complete fixation or rest, leaving no loss of motion, stiffness or any other symptom.

Should such a favorable termination not take place, then the disease must find an outlet, and this it may do in any direction, the pus emptying itself in the groin or on the outer side of the thigh, and at times perforating the acetabulum, and filling the hollow on the inner side of the ileum.

At this stage, again recovery may occur, the pus carrying off any small sequestra, and the granulations becoming first fibrous and then bony. Or the disease may terminate in death, either by exhaustion from the pain or suppuration, or by the supervention of general tubercular infection. Any who are desirous of more fully studying these pathological processes can find them very clearly explained in Lewis' excellent book on "Diseases of the Joints," or in Bradford and Lovett's "Orthopedic Surgery."

*Etiology.* - There is no doubt that heredity is one of the most frequent predisposing causes. In an analysis by Gibney, of New York, of 596 cases of tubercular joint disease, he found one or both parents affected with tuberculosis in sixty-eight per cent., and most authorities agree in considering heredity as a powerful predisposing cause. Volkman says, "Individuals with fungous joint disease spring, practically without exception, from amilies in which scrofula and tubercle are hereditary."

Traumatism also plays a part in the production of this disease.

Averaging authorities, we find about fifty per cent. of all cases attributed to trauma.

General debility, however brought on, also predisposes to joint disease.

To sum up briefly, it would seem to be necessary, in order to produce chronic tubercular joint disease, that there should be the presence of the bacilli in the body, and some slight traumatism to locate it in a joint. It is only too easy to imagine

how the bacilli may find entrance into the system, when we consider the prevalence of tuberculosis in both man and beast. The sputum from every case of phthisis is a source of public danger, and the milk and butter from every tubercular cow is liable to propagate the disease. How common the tubercular cow must be, is well shown in Prof. Bryce's last government report on this subject.

The frequency of trauma, especially in children, is too well known to need emphasizing.

*Symptoms.*—It is often very difficult to trace the very early symptoms of hip-joint disease. A case which I recently saw will well illustrate this.

In inquiring of the mother the history of the case for the dispensary note-book, I asked her, among other questions, when she first noticed anything wrong with the leg, and she stated that great pain and lameness came on suddenly soon after some slight fall or other accident.

Knowing the frequency with which hip-joint disease comes on very slowly, I persisted at different times in inquiring whether she had never noticed anything suspicious before the acute symptoms, and at last succeeded in eliciting the fact that for months before this there had been at intervals complaints of pain in the foot and knee, lasting only for brief periods and then passing off, leaving the limb apparently quite well, thus exciting no suspicion that such a serious disease was present.

Bradford and Lovett say (p. 260, "Orthopedic Surgery"): "The beginning of the affection is most often gradual and insidious, but at times it begins so abruptly, according to the parent's account, as to suggest a traumatic origin."

The case I have just related, forms an interesting commentary on this statement.

As a rule the first symptom to attract attention is a slight limp which, in the commencement of the disease, passes off after the child begins to play or run about, but as time goes on, this limp becomes constant. During this early period there is often no pain, or so little pain as to cause no anxiety. When pain is present, it occurs most frequently at night, causing what are known as "night cries." These usually occur soon after the child falls asleep. It wakes suddenly with either a loud shriek or a moan, and after a few moment's crying will fall asleep again. This may occur several times in a night. With good fixation of the