

have been unable to elicit any history of a hurt or local cause. I am, therefore, driven to the conclusion that the same diathesis exists in the three, manifesting itself in each case in different parts of the body, viz., hip, lungs, and lymphatic glands.

It may here be noted that the changes taking place during the inflammatory process differ from those in a healthy subject. In the latter the tendency is to fibrous organization, in the former to caseous degeneration, embryonic cell formation, and unhealthy degeneration, resembling very much an old ulcer with profuse granulation, without any tendency to heal. In cases of *morbus coxae* the rule is uniform tending to degeneration of all the structures in connection with the joint. Now there must be some reason for those uniform changes, and the question arises, What is it? I have no hesitation in stating that it is the strumous diathesis of the patient.

Again, the constitution becomes involved, especially in the latter stages of the complaint, when it is also not uncommon to find serious lesion of some of the internal viscera, as the lung, spleen, mesenteric glands, and the brain. The disease is essentially of a strumous nature, and can therefore occur only in persons of a strumous diathesis. The surgeon, it is true, is often told that the patient, perhaps weeks or months before the appearance of the disease, received some injury, as a blow, fall or kick, or that the affected joint had been sprained or twisted; but such information is usually little reliable, or if it did take place it probably exerted little if any influence, except as an exciting cause in developing the complaint. We might as well suppose that an injury to the chest would produce tuberculosis of the lungs, or of the head tuberculosis of the arachnoid membrane, as to suppose that an injury to the joint would produce *morbus coxae*. I am more disposed to think that exposure to cold is more likely to light up the disease than an injury, although I am ready to admit that a blow or fall may act as an exciting cause in a person with a strumous diathesis. I believe that the same causes which tend to excite pulmonary phthisis are prime factors in exciting hip-joint disease.

It is stated by some authors that rheumatism might induce this disease, but this is not at all likely, as it is well known that tuberculosis is exceedingly uncommon in rheumatic subjects, and that when disease of the joints shows itself in persons of this description it is very different from the strumous disorder under consideration.

The pathological changes observed in the bodies of those dying of strumous disease of the joints, viz., tubercles and cheesy deposits of the lungs, exhibiting the same characters as in ordinary phthisis, also extensive tubercular deposits in the peritoneum as well as brain and lymphatic glands, are strong proof of the constitutional origin of the disease. On the other hand it is certain that in some persons at least tuberculosis of the joints is a primary disease, and for a long time remains local, so that on autopsy the only tubercle found is in the joint. The question then arises, How does the tubercular virus reach the synovial membrane? It has been admitted that a contusion or a sprain often excites the disease, and Cohnheim thinks that the infection comes through the lungs or intestines, and then the virus circulates in the blood, perhaps with the corpuscles, and escapes at the point of injury, through the vessels which have become permeable from the traumatic inflammation, or in the blood which has been extravasated into the tissue. Mr. Schuller's experiments have shown the possibility of inducing fungous inflammation of the joints by very slight injuries in animals that have been made tuberculous by inhalation. The significance of fungous synovitis, ostitis, pereostitis, etc., termed local tuberculosis, is that at any time they may induce general tuberculosis. I have pretty fully entered into the arguments in favor of the constitutional origin of the disease under consideration, and, in conclusion, allow me to give some further arguments against this theory as advanced by Dr. Sayre, and then I will leave the question with you to draw your own conclusions. He says: I have, unfortunately, recorded only a small part of the cases which have fallen under my observation, but three hundred and ninety-nine cases have been fully entered upon my record, and of these two hundred and thirty-four were under the age of fifteen years, and one hundred and thirty-