

dence pointing to the microbial origin of rheumatoid arthritis, but from the bacteriological researches of Schüller of Berlin, Bannatyne and Blaxall, and of Chaufford and Ramond, it is highly probable that we have here to do with an infectious disease. The acute and subacute poly-articular forms of rheumatoid arthritis have all the clinical characters of an infection. Schüller, who has practised arthrectomy in many cases of rheumatoid arthritis, has examined the tissues for micro-organisms and has constantly found a small bacillus present and occasionally an agglomeration of micrococci. He has also made cultures from the fluid in the joints removed by tapping. He found bacilli develop on various media. The best stain is carbolised fuchsin. Inoculation into the knee of a rabbit produced an arthritis resembling that of chronic rheumatism, but without any changes in the cartilages or bones.

Drs. Bannatyne and Wohlmann, of Bath, working with Dr. Blaxall, of London, have demonstrated the presence of an organism which is said to be constant in its characteristics. It is a very small bacillus, presenting marked polar staining. It was found present in the synovial fluid in 24 out of 25 cases examined. It was also found in the blood in three out of five cases. A bacteriological examination was made of the synovial fluid from joints diseased from other causes with a negative result as far as the special bacillus is concerned. The observers have not succeeded by re-inoculation as yet in producing the original disease in animals.

Chaufford and Ramond have still more recently found in the synovial fluid in cases of rheumatoid arthritis a diplo-bacillus. They also found the same organism in the swollen lymphatic glands in the neighbourhood of the diseased joints, but did not succeed in cultivating the bacillus.

Much work yet requires to be done in the bacteriology of this disease before a true estimate can be made of the value of the researches referred to. In some points they all lack in the extreme care that such work demands, and before they can be accepted the work must be repeated by different observers.

Prof. Bäumler, of Freiburg, the most recent writer on this subject, considers that it is highly probable that the disease is of an infectious nature. At the recent meeting in Berlin of the Congress for Internal Medicine, he read a very able paper on the subject.

I will conclude with the following summary of the chief points in this discussion.

1. Rheumatoid arthritis is a disease prone to occur in people of a rheumatic tendency, and who have suffered from sub-acute rheumatic