

ture was higher. On April 2nd the joint was again emptied and washed through with carbolic lotion. From this time he steadily recovered and left the hospital on May 9th.

I can only briefly summarize the bacillary and experimental investigations of Drs. Paine and Poynton, than which it would be difficult to find work more admirably done or more suggestive.

On cultivation the fluid contained numerous very minute diplococci in chains. Twenty minims were injected intravenously into a rabbit. Arthritis followed in several joints. The heart's action became very excited, and a systolic murmur developed at the apex. Two months later the rabbit was killed. The necropsy showed mitral valvulitis. The joints contained exudation like raw white of egg, and showed swelling due to chronic inflammation in the periarticular tissues. Two other rabbits were treated by intravenous injection, and again a polyarthritis was produced. In none did suppuration occur. "The investigation demonstrated," the authors of the paper observe, "that the exciting cause of the arthritis in the second of the two cases described by Mr. Page was a diplococcus, and that this diplococcus resembled in its morphological and cultural characters the diplococcus of rheumatic fever rather than the streptococcus pyogenes."

On a subsequent occasion Drs. Paine and Poynton at a necropsy found in the exudation and synovial membrane of a knee-joint showing all the changes of osteo-arthritis, a diplococcus which in ten weeks produced an osteo-arthritis of the right knee-joint of a rabbit. This observation is of great importance, and we may hope it will not be long before we hear more from the authors respecting this subject. The severe form of osteo-arthritis occasionally met with after parturition seems especially suitable for bacteriological investigation.

In October, 1901, at the Clinical Society, Dr. Percy Kidd showed a female patient, aged 26, who eighteen months before had become the subject of chronic bronchiectasis. Six months later the sputum was offensive and more copious, and the ankle-joints became affected. Subsequently the wrists and knees were involved. When the patient was exhibited both wrists were swollen, stiff, and tender. The fingers were generally enlarged, the joints swollen and tender, and the ends clubbed. The knees were swollen, each containing a little fluid. The ankle-joints were swollen but not tender. A remarkable point in this case was that the condition of the joints varied with the variation in the bronchiectasis, undergoing considerable improvement when the sputum was limited in amount and less fetid in character, but becoming worse when the sputum was more copious and more fetid.