

hypodermically over the chest were given. Rectal enemata were also given during the later stages of the case. For the last two days no serum was obtainable. Death ensued. Post mortem.—There was a gaping wound in the right labium two inches long. The perineum was practically absent. There was greenish yellow pus in the peritoneal cavity. Pus was also found on the dorsal aspect of the sternum. There was a clot in the right ventricle. The heart muscle was pale and mottled. There were old pleuritic adhesions. There was a tubercular nodule in the right apex. The glands at the root of the lung were enlarged. The stomach was adherent to the liver. The spleen was pale and granular. The right lobe of the liver extended to the iliac crest. Section showed the liver pale and fatty. Looking into the bladder, which was normal, the end of the urethra was found to be gangrenous. The rectum was gangrenous one inch from the anus. The intestines were distended with gas. No communication could be found between the perineum and the peritoneum. The doctor adverted to some of the more interesting points in connection with the case. He thought the serum did some good in prolonging life. In looking into the sparse literature of the subject he had found one case of an acute septic peritonitis and metritis successfully treated with the serum.

Mr. J. J. Mackenzie was invited to discuss the question. He said : The case was one of great interest to me, as it was the first opportunity I have had of administering the antistreptococcic serum. The first work in connection with this kind of serum was done in the Pasteur Institute by Marmorek. The results were published and a short account of some cases of erysipelas in which it was used. There was little in the clinical notes that would allow one to judge of the value of the serum. The serum was got by inoculating horses with a virulent culture. The horses would take larger and larger doses until 200 c.c. were reached. It looked as if a condition of immunity had been established in the horse. Marmorek's work was not confirmed by Petrowsky, of Berlin. The work in connection with the anti-streptococcic serum presents this difficulty. Bacteriologists have confused the various forms of poisons secreted by micro-organisms, and have spoken of the toxins as substances very similar to one another. They have extended the results obtained in diphtheria and tetanus to other diseases. As a matter of fact, there are two sorts of poisons produced by these organisms. First, a soluble poison, similar to the toxin of diphtheria, excreted by the germs. But in addition to these there is a poison associated with the bodies of the germs which is eliminated at their deaths. This latter toxin has an intense necrotic