

condition of "red degeneration" is due to a germ capable of causing hemolysis.

This germ need not of necessity be a very virulent organism; for instance, the streptococcus pyogenes, staphylococcus pyogenes aureus, and albus para-pneumococcus and the colon bacillus have been shown by Lea⁹ and Sidebotham to possess hemolytic properties.

These observers, in examining the lochial discharge from the cavity of the uterus by careful technique, found staphylococcus albus, the organism usually present, but in a few cases the aureus.

Hemolytic and non-hemolytic colonies often existed together on the culture plates.

Organisms were found in 80 per cent. of the cases examined; in 20 per cent. of the cases diplococci were present. They were facultative anaerobes growing equally well aerobically and anaerobically. Many of the colonies showed well-marked hemolysis.

The organisms present in the puerperal uterus were precisely those which have been found frequently in the vaginal secretion during pregnancy. Failure to find germs is usually due to the culture medium. The course of the puerperium was in the great majority of cases entirely uninfluenced by the presence of the organisms. Hemolysis does not form a distinction between saphrophitic and pathogenic organisms.

Having shown that hemolytic bacteria are always in the immediate environs of the fibroid—*e.g.*, the staphylococci, diplococci, streptococci, in the vagina and cervix, and the colon bacillus in the intestine—we have only to explain their probable mode of entrance into the fibroid. Since this red change is a frequent complication of fibroids in pregnancy, it seems probable that the micro-organisms may invade the uterine wall more readily in this condition. The germs are carried very probably by the wandering cells of the endometrium into the blood stream and then into the fissural vascular system of the fibroid; here they become stranded, forming capillary thrombi, very probably. Owing to this inoculation of the bacteria in the sluggish or occluded circulation of the fibroid, they may become more virulent, just as it has been shown that by occlusion of bacteria in the caecum of the rabbit this may increase the virulence of the bacteria. Or, as observed often in appendicitis, occlusion of the appendix by some obstruction, or by kinking, may increase the virulence of the germs in its distal portion, and hence the lesion often takes place there. Then, owing to the hemolytic powers of the bacteria, the red cells become disintegrated, portions of the cells