

up of a single layer of cells which are capable of changing with contraction or peristalsis, and relaxation or congestion of the uterus as in menstruation and pregnancy, from a thick palisade epithelium to extremely flattened cells like a true endothelium. Nor is this the only place where these changes in the cells have been observed.

Much the same phenomena are described in the case of the endothelium of the peritoneum, where pseudo stomata are developed by retraction of the endothelial cells. The same thing happens to the transitional epithelium of the bladder. On distension of this viscus the cubical epithelium becomes for the time flattened or squamous in type.

Small fibroids have their own fissural or collapsible circulation, and it is only in the larger tumors that the capsule may assist in their nutrition.

Causation. As to the aetiology of "red degeneration" a number of theories have been advanced.

Pregnancy undoubtedly predisposes, though it may occur in spinsters. Some authorities consider that the essential and characteristic change is due to a thrombosis of the blood vessels in the red areas.

Professor Lorrian Smith and Shaw³ found the change in four specimens, three associated with pregnancy. Staining by Weigert's fibrin stain, there was no evidence of recent or old extravasations of blood.

But in these specimens the other portions of the tumors not involved in red degeneration showed hyaline degeneration, and it seemed important to investigate whether "red degeneration" was always associated with this hyaline change.

Two of their patients showed toxemic symptoms, with active leucocytosis and bacteria in the tumors; streptococci in one and diplococci in the other. Neither of the other two showed either leucocytosis or bacteria.

Professor Smith considered the bacteria as probably a secondary invasion, predisposed by the thrombosis, and that the thrombosis was due to the pregnancy hampering the circulation and the puerperium increasing the coagulability of the blood.

The objections to this explanation of the causation are: (1) That this condition of red degeneration seems to begin with the pregnancy very often, as shown in the case we are reporting, or to continue throughout its whole course, or until it is interfered with.

Thrombosis is, we know, practically always due to septic infection, and very probably in the cases reported by Smith and