quently presents a cystic condition. The cysts are the result of a proliferation of the cuboidal epithelium which lines the epididymal portions of the embryonic Wolffian duct. The epididymal tubules are located towards one pole of the ovary and are connected with similar tubules lying outside the body of the ovary between it and the oviduct.

Under certain conditions the walls of these blind tubules begin to proliferate, apparently forming a number of new tubules. A fluid accumulates in the interior of the tubules and distends them into spheroidal shapes. They become greatly distended and break into one another or fuse, thus forming large "ovarian cysts" in the case of those tubules lying within the ovary or "parovarian cysts" in the tubules lying outside.

Thus the ovarian and parovarian cysts are similar in structure and their formation is of the nature of a tumor-like growth of the cuboidal epithelium which lines them. The accumulation of fluid which is essential to the formation of typical cysts is not to be considered their primary cause.

In studying a great many ovaries for cystic conditions during several years we have never observed a follicular cyst. Large atretic follicles may be confused at times with small cysts, but such follicles always begin to disappear or atrophy before attaining significant dimensions.

The uterine glands occasionally become cystic. Such cysts usually break into the lumen of the uterus when their epithelial lining becomes greatly distended. These are similar to the ovarian cysts in that both occur under identical conditions in tubules lined by epithelium. The fact that the uterine glands open directly into the lumen of the uterus makes the occurrence of such cysts exceptional.

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Experimental results bearing on the etiology of cystic growths in the ovary and uterus of the guinea pig.

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In experiments on underfeeding it was found that malnutrition readily gave rise to marked cystic conditions in the ovaries

of healthy young guinea pigs. Such cystic conditions are, of course, frequently found in normal stock but here especially in old or unhealthy specimens.

The changed nutritive conditions in the reproductive organs of underfed animals cause circulatory congestion, and as was pointed out in a previous communication[1] such conditions suppress the œstrous changes and prevent ovulation in these animals. The congestion and the high pressure resulting therefrom seem to favor the proliferation of the epithelial lining of the epididymal tubules located near one pole of the ovary, and the accumulation of fluid within the lumen of the blind tubules.

The malnutrition expresses itself first within the ovary by a wholesale degeneration of developing follicles which seem to respond most delicately to changes in nutritive conditions. The congestion and follicular degeneration seem then to favor an overgrowth of the more resistant epididymal tubules which become distended and crowd out the parenchymatous portion of the ovary.

Uterine cysts seem to develop in the same way as those above as a response to the congestion resulting from malnutrition. The open mouths of the uterine glands make their cystic condition rare so that among hundreds of ovarian cysts of all sizes we have observed only one perfectly typical case of uterine cyst.

These experiments seem to indicate that ovarian and parovarian cysts represent growths of persistent embryonic tissue, and that an accompanying congestion and high pressure are necessary to the formation of typical cysts, and that these conditions may result from disturbed nutrition as is demonstrated by underfeeding the guinea pigs.

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The synthesis of benzoyltaurin.

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It appears to be a specific function of several of the amino

[1] G. N. Papanicolaou and C. R. Stockard, PROC. SOC. EXP. BIOL. AND MED., 1920, xvii, 143.