may have started. This is shown in the adjoining photograph, taken 24 hours after inoculation with a virulent staphylococcus culture, recently prepared from a human throat: The epinephrin ear (the right) shows the perforation of the ear by the infection; whilst in the left ear, no inflammation is visible on the inner side, although the ear had been equally wounded and inoculated, but not treated with epinephrin. These differences persist in the further course; the ear that had received epinephrin healing more slowly than the other ear.

Marked differences, although not always quite as striking as these, were obtained in five inoculated rabbits, and in four rabbits without artificial inoculation. In only one rabbit did there fail to be a striking difference between the two ears.

Injection of slightly acidulated water, on the other hand, did not influence the course, showing that the difference is due to the epinephrin, and not to the volume or reaction of the fluid.

The experiment illustrates the current conceptions as to the origin of "colds," *i.e.* by increased susceptibility to infection, through the reflex vasoconstriction of "chills." It also warns against the indiscriminate local use of epinephrin in wounds, and especially in catarrhs.

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Morphology of cystic growths in the ovary and uterus of the guinea pig.

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The ovary in the guinea pig, as in most other mammals, fre-

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