

26 (436)

The survival and growth of subcutaneously engrafted ovarian and testicular tissue.By **C. C. GUTHRIE.***[From the Physiological Laboratories of Washington and Pittsburgh Universities.]*

Fragments of ovaries and testicles in chickens, and testicles in guinea fowls were removed and placed beneath the skin. Other similar fragments were placed in the peritoneal cavity. After several months the engrafted tissues were examined and compared with each other and also with the tissue left in normal situation.

Results. — When engrafted in favorable situations, *i. e.*, in close proximity to large blood vessels,¹ both subcutaneous and intraperitoneal ovarian tissues make a good growth in chickens, being very similar both in gross and microscopical appearance to normal ovarian tissue. In agreement with Lode,² testicular tissue in chickens was found to give good results being very similar to the results for ovaries. The same was also found to be true for guinea fowls. Such engrafted tissues contained numerous spermatozoa.

Results of exchanges of such tissues between the sexes as well as between different species have thus far been negative, but it would be premature to draw definite conclusions from the results.

Using juice prepared from engrafted as well as from normal testicular tissue investigations are being made to determine the feasibility of thus artificially fertilizing hens with the view of testing for a "soma" or "foster father" influence on the sperm; and also to obtain more data on the rôle of the accessory sexual secretions.

¹ Knauer, *Cent. für Gynäkol.*, 1896, xx, 524; *Arch. für Gynäkol.*, 1900, lx, 322.

² Lode, *Wiener klin. Woch.*, 1895, viii, 345.