

**Effect of Testosterone Propionate on Fallopian Tube Peristalsis.**

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In a previous study it has been shown that estrogenic hormone initiates and controls peristalsis of the fallopian tubes. This was demonstrated by producing normal tubal contractions in women after the menopause following the administration of estradiol benzoate.<sup>1</sup> At present we wish to report on the effect of testosterone propionate on normal tubal peristalsis.

It has been shown that testosterone propionate, when administered in adequate amounts to women with normal menstrual cycles, suppresses menstruation,<sup>2, 3, 4</sup> induces regressive changes in the endometrium<sup>2</sup> and estrogen deficiency changes in the vaginal smear.<sup>4, 5</sup> We were interested to find out if testosterone propionate would inhibit the muscular contractions of the Fallopian tubes.

A series of 5 women who were menstruating regularly were selected for this study. A preliminary tubal contraction record was obtained between the 7th and 10th day of the cycle. Tubal contractions were recorded on a kymograph, using the Rubin insufflation (carbon dioxide) technique.<sup>6</sup> Thereafter the patients were given intramuscular injections of testosterone in oil,\* in doses of 50 mg 3 times weekly. Tubal contraction recordings were taken at intervals of 7 to 14 days.

In all of the cases tubal contractions were completely inhibited when the patients had received approximately 500 mg of testosterone propionate. With smaller doses (approximately 200-300 mg) the contractions were reduced in amplitude and frequency.

It appears from these observations that testosterone propionate counteracts the muscle-stimulating action of estrogenic hormone, resulting in a suppression of the normal tubal contractions.

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<sup>1</sup> Geist, S. H., Salmon, U. J., and Mintz, M., *Am. J. Obs. and Gyn.*, 1938, **36**, 67.

<sup>2</sup> Gaines, J. A., Salmon, U. J., and Geist, S. H., *PROC. SOC. EXP. BIOL. AND MED.*, 1938, **38**, 779.

<sup>3</sup> Loeser, A. A., *Lancet*, 1939, **1**, 373.

<sup>4</sup> Papanicolaou, G. N., Ripley, H. S., and Shorr, E., *PROC. SOC. EXP. BIOL. AND MED.*, 1938, **37**, 689.

<sup>5</sup> Salmon, U. J., Walter, R. I., and Geist, S. H., *PROC. SOC. EXP. BIOL. AND MED.*, 1938, **39**, 467.

<sup>6</sup> Rubin, I. C., *J. A. M. A.*, 1929, **92**, 1597

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