

One adult patient, aged 39 years, with a typical clinical picture of thrombocytopenic purpura was given 15 cc of sesame oil daily for 17 days. At entry to the hospital the platelet count was 18,000 and after treatment, 28,000. This apparent rise was within the limits of error of the method used and was not thought to be significant.

One infant, aged 19 mos, also having thrombocytopenic purpura was given 30 drops of sesame oil orally for 11 days and during this period received 2 small transfusions of blood. The platelet count rose from 12,000 to 74,000. A rise of this magnitude in infants is not unusual in untreated purpura.

In neither the rats nor patients treated with sesame oil did the platelets rise to levels of near or over 1,000,000 as described by Schiff and coworkers.

*Summary.* Oral administration of sesame oil had no effect on the platelet levels of 6 adult rats or 2 patients with thrombocytopenic purpura.

### 10773

#### Effect of Thyroid Feeding on Androgen Excretion Following Testosterone and Testosterone Propionate Injections in Rabbits.

DAVID MARINE AND S. H. ROSEN.

*From the Laboratory Division, Montefiore Hospital, New York City.*

We have been unable to detect any comb growth-promoting substance in the urine of untreated normal adult male rabbits or in the feces of male rabbits even when they were given 10 mg of testosterone or testosterone propionate daily for 4 or 5 days. On the other hand, the above mentioned doses of these androgens regularly lead to the excretion of considerable amounts of androgen in the urine. This result is confirmatory of the observations of McCullagh, *et al.*,<sup>1</sup> Hoskins, *et al.*,<sup>2</sup> Dorfman and Hamilton,<sup>3</sup> and many others, and is at variance with the observations of Kochakian.<sup>4</sup>

In these experiments 5 mg of testosterone or testosterone pro-

<sup>1</sup> McCullagh, E. P., Rumsey, J. M., and Cuyler, W. K., *Proc. Cent. Soc. Clin. Res.*, 1938, **11**, 18.

<sup>2</sup> Hoskins, W. H., Coffman, J. R., Koch, F. C., and Kenyon, A. T., *Endocrinology*, 1939, **24**, 702.

<sup>3</sup> Dorfman, R. I., and Hamilton, J. B., *J. Clin. Invest.*, 1939, **18**, 67.

<sup>4</sup> Kochakian, C. D., *Endocrinology*, 1939, **24**, 331.

TABLE I.

Rabbit No.	Days of urine collection	Androgen used (daily dose 10 mg)	No. days given	Desic. thyr. (daily dose mg)	No. days given	Thyroid status	Testes status	Comb growth 6 days H + L mm	Total androgen excretion as androstosterone mg
1702	4	Testosterone propionate	4			Intact	Intact	8%	2.82
1702	5	"	5	100	5	Thyroidectomy	Cryptorchid	7%	2.36
1702	5	"	5			"	"	11%	4.00
1703	4	"	4			Intact	Intact	9	2.91
1703	5	"	5	100	5	Thyroidectomy	"	7%	2.36
1703	5	"	5			"	"	12	4.36
1430	4	"	4			"	"	5%	1.55
1430	4	"	4	100	5	"	"	9%	3.27
1599	4	"	4			"	Gonadectomy	6%	1.91
1599	4	"	4	100	5	"	"	7%	2.36
1703	4	Testosterone	4	100	5	"	Cryptorchid	9%	3.26
1703	4	"	4			"	"	10%	3.55
1703	5	"	5			"	"	11%	4.18
1702	5	"	5	100	5	"	"	12%	4.55

pionate\* in 1 cc of sesame oil were injected into the abdominal wall twice daily for 4 or 5 days with or without the daily oral administration of 100 mg of desiccated thyroid for similar periods. Desiccated thyroid administration was begun 1 day before the first dose of androgen. The urine was collected under benzene and extracted according to the method of Dingemanse and Laqueur.<sup>5</sup> The extracts were assayed by Fussgänger's<sup>6</sup> modification of the capon comb test. The essential data of the experiments are given in Table I.

It will be seen that 2 intact rabbits receiving 40 mg of testosterone propionate excreted slightly more urinary androgen than the same rabbits after thyroidectomy and the intraabdominal suspension of their testes, although 50 mg were given. When 50 mg of testosterone propionate were injected and 500 mg of desiccated thyroid given there was nearly twice as much androgen excreted in 3 of the 4 rabbits. The rabbit (1599) with only a slight increase in androgen excretion following desiccated thyroid administration had been gonadectomized. When testosterone was given to the same rabbits there was no difference in the androgen excretion whether or not desiccated thyroid was administered.

These experiments explain from another angle the greater physiological activity of testosterone propionate and suggest that there may be little or no difference between the action of testosterone and testosterone propionate if the latter is given with desiccated thyroid. They further indicate that the more prolonged action of testosterone propionate is due to delayed hydrolysis rather than differences in the rate of absorption and that the thyroid hormone hastens the splitting of the ester after absorption. One could also infer from these experiments that the esters of testosterone would be physiologically more effective after subtotal thyroidectomy, and this is indicated in their exophthalmos promoting effect.<sup>7</sup>

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<sup>5</sup> Dingemanse, E., and Laqueur, E., *Biochem. J.*, 1937, **31**, 500.

<sup>6</sup> Fussgänger, R., *Med. u. Chem. Forschungstätten*, 1934, **2**, 194.

<sup>7</sup> Marine, D., and Rosen, S. H., *Proc. Soc. Exp. Biol. and Med.*, 1938, **38**, 353.