



EDITORIALS

TESTOSTERONE TREATMENT OF HEMOCHROMATOSIS

In recent years there have been reports¹ suggesting that in patients with hemochromatosis the use of testosterone may be of benefit, at least symptomatically, with apparent improvement in strength and sense of well-being. Such beneficial results have been thought to be related to the gonadal hypoplasia commonly seen in hemochromatosis and to the anabolic effect of testosterone on protein metabolism. Consequently, the paper of Pirart and Franken² of the Brugmann Hospital in Brussels is of interest.

They studied 9 patients with proven hemochromatosis of whom 7 were men aged 44 to 70 years and 2 were women aged 56 and 59 years, respectively. The iron content of the serum of the 9 patients averaged 225 gamma per cent (range = 40 to 360 gamma per cent) whereas that of 10 normal subjects averaged 84 gamma per cent. The oral administration of 176 mg. of bivalent iron as ferrous gluconate did not cause any elevation of serum iron during the 4 hours following ingestion. However, when 20 mg. of iron in the form of an organic compound only slightly ionizable, were given intravenously and the iron content of the serum determined at 5 and 120 minutes following injection, a characteristic curve was obtained in both normal subjects and in patients with hemochromatosis.

Patients were then treated by injection of testosterone propionate in dosage of 50 mg. twice weekly for 3 weeks. No effect was seen clinically. At the end of the treatment period, iron was again injected intravenously in order to obtain tolerance curves to compare with those secured prior to testosterone treatment. A moderate though definite average lowering of the curves was obtained suggesting that, if anything, iron found its way more readily into the tissues following a course of testosterone treatment.

As the result of these studies, the authors conclude

that the giving of testosterone has no specific benefit in hemochromatosis and that it may even act deleteriously by favoring the transfer of iron from the blood into the tissues. However, since in the oral tolerance test, no change in serum iron was obtained and since there is no evidence that testosterone favors the absorption of iron from the intestinal tract, there would appear to be no basis for fearing aggravation of hemochromatosis by testosterone unless iron is being administered parenterally. The real value, if any, of testosterone in the treatment of hemochromatosis awaits further study.

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REFERENCES

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- ² Pirart, J. and Franken, L.: Traitement de L'hémochromatose par la Testosterone. *Etude Biologique de 9 cas, Semaine des Hop. de Paris* 29:48-49, July 26-30, 1953.

TRYPsin TREATMENT OF SUPERFICIAL GANGRENOUS LESIONS

The vulnerability of the lower extremities of older diabetics, on account of the tendency of the skin and subcutaneous tissues to become necrotic following local injury or infection, represents one of the major problems relating to diabetes today. When there is no serious impairment of the circulation and when the lesion is not extensive, conservative measures may lead to separation of the necrotic tissue and subsequent healing. However, even with thorough control of the diabetes with diet and insulin and the effective use of antibiotics to combat infection, a prolonged period of hospitalization may be necessary. Every physician or surgeon responsible for