

## ANDROGEN THERAPY OF A VARICOCELE

JEROME H. CHECK\* AND ABRAHAM E. RAKOFF†

*From the Department of Obstetrics and Gynecology, Division of Gynecologic Endocrinology and the Department of Medicine, Division of Endocrinology, Thomas Jefferson University Medical School and Hospital, Philadelphia, Pennsylvania*

### ABSTRACT

A case of asthenospermia and decreased semen volume with consequent infertility is reported. The patient had large bilateral varicoceles but refused an operation. Significant improvement of volume and motility occurred after treatment with fluoxymesterone and pregnancy was achieved.

There have been several reports of improvement in semen characteristics by treatment with androgen therapy.<sup>1-4</sup> Fluoxymesterone in higher doses (20 mg. per day) was reported to improve sperm motility,<sup>3</sup> while others have reported improved motility and volumes with lower doses of fluoxymesterone (2 mg. per day) and suggested that higher doses can diminish sperm production.<sup>4</sup> In the series reported by Urry and Cockett it is not clear whether the patients demonstrated sufficient improvement in semen characteristics with fluoxymesterone to achieve pregnancies.

We have used 2 and 5 mg. fluoxymesterone in men with oligospermia, asthenospermia and low volumes without a tremendous improvement in the majority of patients.<sup>5</sup> However, herein we report a case in which fluoxymesterone was directly responsible for the improvement in semen characteristics.

### CASE REPORT

A 38-year-old man was referred because of an 8-year history of infertility. Four years before the initial consultation he had large bilateral varicoceles but refused a varicocelectomy. During the last 4 years 2 spermograms were reported as 32 times  $10^6$  and 30 times  $10^6$  per cc, with volumes of 0.5 cc and 10 per cent grade I/IV motility (motile in place, no linear progressive movement). A repeat semen analysis 2 years later was 25 times  $10^6$  per cc, with a volume of 0.3 cc and 20 per cent grade II motility (slight linear progressive motion).

We performed 2 base line spermograms that revealed volumes of 0.5 cc, counts of 25 times  $10^6$  and 28 times  $10^6$ , and motility scores of 40 and 25 per cent grade I. Both spermograms had 30 per cent tapered heads and 20 per cent immature cells. During a 6-month period the patient noticed a decreased libido, mild impotence and cessation of morning erections. Physical examination was normal except for bilateral moderately sized varicoceles.

Fluoxymesterone, 2 mg. daily, was administered. After 3 months the count decreased to 13 times  $10^6$ , volume 0.5 cc and motility 30 per cent grade II. Fluoxymesterone was increased

to 5 mg. daily and 3 months later the count was 25 times  $10^6$ , volume 3 cc and motility 70 per cent grade III, with 10 per cent tapered heads and 10 per cent immature cells. The next month the spermogram was exactly the same except that the count was now 26 times  $10^6$  per cc. A pregnancy was achieved this cycle.

### DISCUSSION

In the report by Urry and Cockett 10 patients showing improvement had varicoceles.<sup>4</sup> However, there was no mention of the significance of the improvement. The etiology for the low testosterone in our patient is unknown, although it may have been secondary to the varicoceles.<sup>6</sup> The fluoxymesterone therapy appears to be the only explanation for improvement of the spermogram. Also, in our case 2 mg. fluoxymesterone were not effective, whereas a 5 mg. dose was required.

Although we do not believe that fluoxymesterone therapy will benefit the majority of infertile men, nevertheless, there are selected cases of asthenospermia and low volume that will respond. A group that should be investigated in a larger series would be those men with varicoceles who refuse an operation or who have had varicocelectomies but have not improved, especially if the serum testosterone is low or low normal.

### REFERENCES

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\* Requests for reprints: Jefferson Medical College, Room 300, 1025 Walnut St., Philadelphia, Pennsylvania 19107.