

Regression of uterine leiomyomas after treatment with gestrinone, an antiestrogen, antiprogestosterone.

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Ninety-seven women, aged 18 to 53 years, with uterine leiomyomas diagnosed by bimanual palpation and ultrasonography, were treated for 4 to 13 months with gestrinone, a potent steroidal, antiestrogen, antiprogestosterone. Thirteen women were <30 years old and six 50 years old or older. Forty-six women were 30 to 40 years old and 32 others were 40 to 50 years old. Sixty-one women were nulliparous. Patients were divided in a random fashion into three groups according to treatment schedule. In group A, 34 patients received capsules containing 5 mg of gestrinone twice weekly. In group B, 36 patients received 2.5 mg capsules three times weekly. In group C, 27 patients were instructed to insert 2.5 mg tablets in the vagina three times weekly. Uterine volume was measured by ultrasonography before and at the end of treatment. At the end of 4 months, uterine volume fell from 303 to 251 cm³ in group A, from 361 to 266 cm³ in group B, but increased from 371 to 387 cm³ in group C. For those patients treated for 10 (\pm 1) months, mean uterine volume fell from 368 to 282 cm³ in group A and from 384 to 327 cm³ in group B, but increased from 262 to 290 cm³ in group C. Mean uterine volume of patients who were treated for 13 (\pm 1) months also fell from 325 to 259 cm³ in group A, from 416 to 268 cm³ in group B, and from 406 to 399 cm³ in group C. Changes in uterine volume measured at the time of discontinuation for the various groups revealed volume decrease in 71 and increase or no change in 26. Differences between groups A, B, and C were statistically significant when comparisons were made at 4 and 13 months. Uterine bleeding ceased by the second month of treatment in half the the desire to conceive. Many were more than 40 years old, and others had bilateral tubal occlusion or troubles with ovulation in addition to their leiomyomas. Some had infertile or subfertile husbands, and a few were divorced. Moreover, at the time of the writing this report >40% of patients had less than 1 years of follow-up following discontinuation. A more accurate evaluation of the efficacy of gestrinone therapy will require careful selection of cases, since factors such as the patient's age and the tumor's size and recency appear to influence therapeutic response.

Although other possible mechanisms of inducing shrinkage of myomas may be achieved by creation of an artificial menopause through pituitary desensitization by luteinizing hormone-releasing hormone analogs, the results of the present trial show that gestrinone treatment achieves, in addition to a reduction in tumor size, prompt suppression of excessive bleeding and relief of pain, without the inconvenience of menopausal symptoms that may develop when luteinizing hormone-releasing hormone analogs are used.^{11,12} The treatment may also be useful in conditioning patients for surgery because it allows restoration of depleted iron reserves before and reduces risk of bleeding during the operation itself.

Uterine volume of patients treated for 2 years is shown in Table 4. Mean uterine volume of 39 patients treated for 2 years at admission was 339 cm³. At the end of 2 years, it had decreased to 273 cm³. This difference was statistically significant with $P = 0,01$. Statistical significance was lost when patients were

separated by groups, except for those of group C, where $P = 0.045$. Figure 2 Shows the uterus of one patient treated for 2 years. Figure 3 is a graphic representation of the changes in volume occurring at various treatment intervals and where patients are grouped by treatment duration rather than by mode of administration.

Softening of uterus and hard myomata was perceptible by manual palpation as early as 2 weeks after initiation of gestrinone therapy. In approximately one-half of all patients, disappearance of the most disabling symptoms, such as excessive bleeding and pain, occurred within 2 months of treatment. At the end of 3 months, 86% of patients in group A, 80% of those in group B, and 76% of group C had ceased to bleed. In only four women did gestrinone fail to control bleeding, requiring curettage or surgery. The suppressive effect of the treatment on uterine bleeding persisted throughout the duration of gestrinone administration, as shown in Figure 4. Amenorrhea lasted usually for 1 month after discontinuation of therapy.

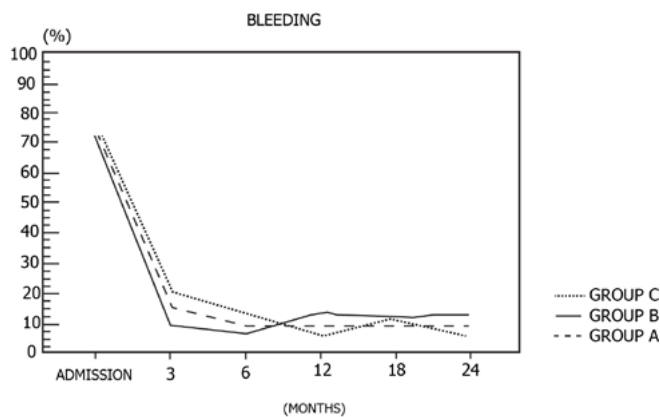


Figure 4. Effect of gestrinone treatment on uterine bleeding of patients with leiomyomas. Note that by the third month of treatment, most patients are amenorrhoeic. Note also that suppression of uterine bleeding lasts throughout the 2 years of treatment.

References

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