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Danazol in the Management of the Pre-Menstrual Syndrome. A double-Blind Cross-Over Trial.
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Thirty-nine women with severe pre-menstrual syndrome symptoms and regular menstrual cycles were observed over eight menstrual cycles. Twenty-nine had previously been treated unsuccessfully. After 2 baseline cycles 36 women were allocated randomly to receive Danazol 200 mg twice daily, continuously or identical placebo, with cross-over after 3 months. Twenty subjects completed the study. The Moos Menstrual Distress Questionnaire (Moos, 1968) was completed daily and data analysis was carried out for the last pre-menstural week of each phase of the trial for the commonest presenting symptoms and for Moos' symptom clusters. Depression, mood swings, irritability, tension, breast discomfort and swelling and the symptom clusters of pain, fluid retention, concentration, behavioural change and negative affect were significantly improved by Danazol 400 mg daily when compared with placebo. Only 3 subjects withdrew because of side effects. Reduction in menstrual flow was frequently observed. Using the experience gained in the initial study a similar trial of Danazol 200 mg once daily is being conducted. It is submitted that Danazol is an effective treatment for severe pre-menstrual syndrome and may be effective when other therapies have failed.

References.

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CLONED SHIONOGI MOUSE MAMMARY CARCINOMA CELLS DEVELOP A WIDE RANGE OF SENSITIVITIES AS WELL AS RESISTANCE TO ANDROGENS.
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Clones obtained in soft agar from a Shionogi mouse mammary carcinoma show marked heterogeneity of spontaneous growth in the absence of androgens, of maximal response to dihydrotestosterone (DHT) while the Km values of the stimulatory action of DHT range from 0.008 to 10 nM (1250-fold range of sensitivities to the androgen). Following 9 months in culture in the presence of 10 nM DHT, recloning of one cell clone led to an even greater variation of androgen-free growth and of maximal response to DHT while the Km values of DHT action ranged from 0.05 to 10 nM (200-fold range of sensitivities to DHT). The present demonstration of a marked heterogeneity of Km values of DHT action in subpopulations of tumors grown in a controlled environment has major implications for the efficient antihormonal treatment of androgen-sensitive diseases such as prostate cancer. Such data indicate that cell clones having a higher degree of sensitivity to DHT can continue to grow in the presence of castration levels of androgens and suggest that an antiandrogen is required in order to achieve a more complete androgen blockage. Preincubation of androgen-sensitive Shionogi mouse carcinoma cells for 15 days in the absence of androgens causes the development of a complete resistance of cell growth to androgens. Of potentially important therapeutic significance is the finding that androgen sensitivity can be maintained, not only by the androgen DHT but also by incubation with the pure antiandrogen Flutamide-OH in the absence of androgens. Since androgen resistance is one of the main problems facing the successful treatment of prostate cancer, the possibility of maintaining, or at least delaying, the development of androgen resistance with a pure androgen could well provide the basis for improving the success of therapy of this disease.