Sexuality Changes in Prostate Cancer Patients Receiving Antihormonal Therapy Combining the Antiandrogen Flutamide with Medical (LHRH Agonist) or Surgical Castration

L. Rousseau, M.D., F.R.C.P. (C), A. Dupont, M.D., Ph.D., F. Labrie, M.D., Ph.D., F.R.C.P. (C), and M. Couture, M.A.

The results of a written questionnaire with 44 patients (pilot study) indicated that before the beginning of treatment for advanced prostatic cancer, most subjects had an active sexual life, as illustrated by a normal erotic imagery, an adequate sexual desire and a normal frequency of intercourse. More than three-quarters (80%) of subjects had at least one coitus a week. Slightly more than 50% were able to easily achieve an erection by erotic imagery or by a preferred sexual fantasy; 50% never experienced erectile problems. When compared with their previous sexual functioning, 70% of subjects noticed during the antiandrogenic treatment a major reduction in their interest for sexual intercourse which was maintained in only 18% of patients. It became impossible for 57% to induce an erection by erotic imagery. However, 19% claimed an ability to maintain an erection during sexual activity, as compared to 56% before treatment, but erections usually lacked full rigidity. Twenty-two percent of patients mentioned having nocturnal or morning erections. Despite this dramatic decrease in sexual activity in most patients, complete antiandrogen blockade left sexual activity in approximately 20% of

A preliminary report of this work was presented at the International Symposium on LHRH and its Analogues held in Québec City on June 28-30th, 1984.

1Human Sexuality Program, Laval University Medical School, Québec, Canada.
2Department of Molecular Endocrinology, Laval University Medical Center, 2705 Laurier Boulevard, Québec G1V 4G2, Canada.
3120 Montmorency Street, Boischatel, Québec G0A 1HO, Canada, and Sex Offenders Clinic, Robert Giffard Hospital Center.
4To whom correspondence should be addressed at Department of Psychiatry, Laval Hospital, 2725, Chemin Sainte-Foy, Québec, G1V 4G5, Canada.
patients. Due to the treatment's excellent tolerance, the findings suggest that such combined androgen blockade could be beneficial for the treatment of sex offenders.

KEY WORDS: sexual behavior; prostatic cancer; medical castration; orchietomy; antiandrogen; LHRH agonist; sexual desire; intercourse; erectile problems; sex offenders.

INTRODUCTION

Cancer of the prostate is the second most frequent cause of death due to cancer in man. So far, the two most commonly used forms of treatment have been surgical castration and the administration of high doses of estrogens which were first used by Huggins and Hodges (1941) and Huggins et al. (1941). These two forms of treatment have been associated with significant clinical improvement in 60 to 80% of patients for limited time intervals (Resnick and Grayhack, 1975). Although orchietomy has psychological limitations in many patients, estrogens have serious cardiovascular side effects.

![Fig. 1. Schematic representation of the combined action of an LHRH agonist and a pure antiandrogen in the treatment of prostate cancer. The LHRH agonist blocks testicular androgen formation, thus achieving medical castration while the pure antiandrogen neutralizes the action of remaining male hormones, specially those produced in the prostate cancer from precursors secreted by the adrenal cortex.](image)