Clinical Findings

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Prospective Study of Diethylstilbestrol-Diphosphate in the Treatment of Prostatic Cancer in Relapse

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Key Words

Diethylstilbestrol-diphosphate

Prostatic cancer, relapse

Pain

Abstract

Since Flocks et al. reported impressive responses using diethylstilbestrol-diphosphate in the treatment of advanced prostatic carcinoma, other groups confirmed the significant relief of bone pain in patients previously untreated or in relapse. We treated 24 patients with advanced prostatic carcinoma in progression after a first hormonal manipulation. Progression was defined according the EORTC GU Group response criteria. All patients received daily 500 mg diethylstilbestrol-diphosphate intravenously for 10 days, afterwards they were given three times daily 100 mg p.o. There was no complete or partial objective remission. Pain relief was noted in 16 patients, but was short lived in 7 of them. Fourteen patients stayed in progression. The mean survival time was 4 months (between a few weeks and 23 months). There were no significant cardiovascular side effects. It is concluded that this drug may play a role in the subjective pain relief in the treatment of relapsed prostatic cancer.

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Introduction

Patients in relapse after previous hormonal therapy are often difficult to treat, and for many years there have been trials for several drugs which might be used in the medical management of this group.

Since Flocks et al. [2] reported impressive subjective responses using diethylstilbestrol-diphosphate in the treatment of advanced prostatic cancer, other groups confirmed the significant relief of bone pain in patients previously untreated or in relapse [1, 3, 5].

This prospective study was undertaken in order to evaluate the objective and subjective responses to diethylstilbestrol-diphosphate (Honvan®) in patients with advanced prostatic cancer in relapse after prior hormonal manipulation.

Patients and Methods

A group of 24 patients with histologically proven advanced prostatic cancer with measurable metastatic disease were diagnosed as being in progression, after bilateral orchiectomy failed to control their disease. The diagnosis of relapse or progression is based on the response criteria of the phase III trials of the EORTC GU Group [4]. The same criteria were also used to evaluate the responses of these patients to the Honvan therapy.

Before treatment the patients underwent the usual workup: history, physical examination, pain score, performance status, standard laboratory investigation, endocrine evaluation, urography,

chest X-ray, bone scan, and transrectal ultrasound evaluation of the prostate. Except for the radiological and isotopic examination done each 3 months, all other evaluations were repeated each 6 weeks.

Honvan was given 500 mg daily for 10 days, followed by 100 mg p.o. three times daily.

Results

Twenty-two of the 24 patients who entered this study were evaluable after the first 6 weeks of treatment, as 2 patients died before the first evaluation. Their mean age was 71 years, ranging from 52 to 95 years. All presented a T3/T4 Nx Mi prostatic cancer. All patients had undergone bilateral orchiectomy, and their serum testosterone values were at castration level.

No objective signs of complete or partial remission were recorded in any of the patients. A no change status

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lasting from 8 to 12 weeks was noted in 8 patients. The 14 others remained in progression.

Serum acid phosphatase levels, elevated in 21 patients, never normalized, but decreased gradually in 10 patients.

Subjective improvement was observed in 16 patients and manifested itself by a decrease of pain medication requirements or increased performance status. Duration of this subjective improvement lasted only in 8 patients for more than 6 weeks.

The survival time varied between a few weeks and 23 months, with a mean survival time from start of treatment of 4 months. Six patients survived for 6 months, and only 1 of them survived for 23 months.

Side effects were minimal. Two patients developed ankle edema during the course of treatment, and 2 patients complained of nausea.

Discussion

It is well known that the prognosis of patients with prostatic cancer in relapse remains dismal.

Palliation of pain and concern for the quality of life, however, are important factors in the medical management of these patients, and any drug which could benefit them should be evaluated in clinical trials. While there was no objective response to the drug in this study, more than half of the patients at least experienced some subjective improvement, although for rather short periods.

References

Band, P.R.; Banerjee, T.K.; Patwardhan, V.C.: High-dose di-ethylstilbestrol diphosphate therapy of prostatic carcinoma after failure of standard doses of estrogens. *Can. med. Ass. J.* 709: 697 (1973).

Flocks, R.H.; Marberger, H.; Beley, B.J.; Prendergast, L.J.: Prostatic carcinoma: treatment of advanced cases with intravenous diethylstilbestrol diphosphate. *J. Urol.* 74: 549 (1955).

Huri, K.T.; Guinan, P.; Sundar, B.; Zamora, S.; Ablin, R.: Large dose intravenous female hormones for advanced prostatic cancer, (Abstract No. 260). 12th Int. Cancer Congr., Buenos Aires 1978.

Newling, D.W.W.: Criteria for response to treatment of meta-static prostatic cancer; in EORT GU Group Monogr., vol. 2, part A: Therapeutic principles in metastatic prostate cancer, p. 205 (Liss, New York 1985).

Susan, L.; Roth, R.; Adkins, W.: Regression of prostatic cancer metastases by high doses of diethylstilbestrol diphosphate. *Urology* 7:598 (1976).