Radiotherapy plus goserelin improved 5-year survival in locally advanced prostate cancer


Objective
To determine whether the addition of goserelin to radiotherapy improves survival in patients with locally advanced prostate cancer at high risk for metastases.

Design
Randomised controlled trial with median 45-month follow-up.

Setting
European Organization for Research and Treatment of Cancer Centres (20 in Europe, 3 in Israel, and 2 in North America).

Patients
415 patients who were < 80 years of age (median age 71 y) and had locally advanced prostatic carcinoma without involvement of regional lymph nodes. Exclusion criteria were previous treatment for prostate cancer, previous malignant disease other than basal cell skin carcinoma, or evidence of distant metastases. Data were available for 401 patients (97%).

Commentary
In this well-designed, randomised clinical trial, Bolla and colleagues have helped to clarify the role of hormonal therapy in the management of the early asymptomatic phase of prostate cancer. They have also clearly shown that early administration of goserelin reduces overall mortality and rate of progression of prostate cancer.

Clinicians should, however, be aware of 2 important issues related to the applicability of these results. First, all study patients had "locally invasive disease," defined as either high-grade prostatic cancer that is intracapsular (T1) or confined to the gland (T2), without involvement of lymph nodes (N0-X), or low-grade tumours that have extended beyond the capsule (T3) or have infiltrated neighbouring structures (T4), without involvement of lymph nodes.

Interestingly, 90% of patients who participated in this trial belonged to the second group (stages T3 and T4). Therefore, the study primarily shows that hormonal therapy benefits those patients with disease that has extended beyond the capsule but has not yet involved lymph nodes and who are offered radiation therapy.

The second issue related to applicability is the substantial number of side effects, such as impotence, hot flashes, and nausea, that occurred in the combined-treatment group. For example, impotence occurred in 40% of the patients in that group compared with only 12% in the radiotherapy-alone group. These 2 issues need to be considered when offering combined hormonal and radiation therapy to a patient.

In addition, several important questions remain. Who should we screen for prostate cancer? Is radiotherapy superior to prostatectomy for tumours of similar stage and grade (1)? Is any therapy beneficial in the very early stages of prostate cancer (T1 and T2) (2)? In the meantime, those patients with early-stage prostate cancer who have agreed to radiotherapy should be offered combined radiotherapy and hormonal therapy.

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References