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# The natural history of noncastrate metastatic prostate cancer after radical prostatectomy

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Objectives: To characterise the natural history of metastatic prostate cancer after radical prostatectomy (RP) in patients followed expectantly for rising prostate-specific antigen (PSA) (noncastrate metastases).

Methods: Cox proportional hazards analyses were used to assess predictors of survival among 95 patients who developed clinically detectable noncastrate metastases after RP. The initial metastatic phenotype was characterised as minimal (nodal or axial skeletal involvement) or extensive (appendicular skeletal involvement or visceral metastases). Estimates of survival after diagnosis of metastases were generated with the Kaplan-Meier method.

Results: Median disease-specific survival from diagnosis of noncastrate metastases was 6.6 yr (95% confidence interval [CI], 5.2, 7.9). The initial site of metastatic disease was bone, lymph node, and viscera in 63%, 36%, and 6% of patients, respectively. Thirteen patients (14%) had extensive disease at their first metastatic manifestation. Longer PSA doubling time in the rising PSA state (hazard ratio [HR] 0.8 for each month increase in doubling time; 95% CI, 0.67-0.94) and the initial metastatic phenotype (HR 0.3 for minimal vs. extensive disease; 95% CI, 0.1-0.6) were associated with improved survival. The prostatectomy Gleason score, lymph node status at RP, PSA level at diagnosis of metastases, and interval from surgery to diagnosis of metastases did not correlate with outcome.

Conclusion: Men who develop noncastrate metastases after RP may have a durable survival. Favourable prognostic indicators include longer PSA doubling time preceding diagnosis of metastases and initial involvement of axial skeleton or lymph nodes.

#### **Editorial Comment**

What happens to patients with metastatic prostate cancer without hormonal deprivation (noncastrate metastases)? These patients nowadays are quite rare and it is very interesting to read this article on 95 patients who developed metastases after radical prostatectomy (RP) and were not castrated.

The time from operation to development of metastases was 3.2 years median, and the median cancer-specific survival thereafter was 6.6 years.

Interestingly, in these patients neither Gleason sum score nor lymph node status at RP, PSA level at diagnosis of metastases correlated to outcome. In contrast, fast premetastatic PSA doubling time and extensive (that is, fast) development of metastases were indicators of poor survival.

The authors propose a flow diagram which may be helpful to identify patients with high risk for the development of metastases in which the first identifier of poor outcome is PSA doubling time < 3 months.

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## **Urological Survey**

# Impact of diagnostic delay in testis cancer: results of a large population-based study

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Objective: Testis cancer is the most common cancer in young men, and its incidence continues to rise. Even if prognosis is considered as good, a group with bad prognosis still remains. Diagnostic delay (DD), defined as the time elapsing from the onset of tumour symptoms to the day of diagnosis, is a way to evaluate the rapidity of diagnosis. We assessed the relationship between DD, disease stage, and survival rate.

Methods: A series of 542 patients diagnosed with a germ cell tumour between 1983 and 2002 at health facilities in the Midi-Pyrenees region, southwest France, were asked about DD. We analysed DD together with data regarding the disease (histologic type, stage), its treatments, and prognosis (impact on survival).

Results: Mean DD was longer in seminoma  $(4.9 \pm 7.6.1 \text{ mo})$  than in non-seminomatous germ cell tumour (NSGCT;  $2.8 \pm 7.4.0 \text{ mo}$ ). DD was correlated with disease stage for the whole population (p = 0.014) and for NSGCT (p = 0.0009), but not for seminoma. DD had a significant impact on the 5-yr survival rate in the overall population (p = 0.001) and in the NSGCT group (p = 0.001), but not in the seminoma group. Global trends in mean DD did not change over the 20-yr study period, but we observed a slight decrease during the last decade.

Conclusions: DD is highly correlated with stage and survival in NSGCT. Urologists should promote programmes to enhance awareness and knowledge of testis cancer, so the diagnosis can be made more rapidly.

### **Editorial Comment**

The authors report on the impact of diagnostic delay on ultimate outcome on survival. They report on a large cohort of 542 patients over a time of 20 years. This paper shows quite impressively that testicular tumors are often neglected by the patients for longer periods. Differences between seminomas and non-seminomatous germ cell tumors (NSGCT) certainly relate to the different growth rates between these tumors and how fast the patient begins to feel uncomfortable with this unclear process in his scrotum. In fact, diagnostic delay in NSGCT resulted in a significantly impaired survival. The authors state correctly that consequently, testis cancer awareness programs should be promoted and young men should be educated in scrotal self-examination.

One final question however was not addressed in this paper, that is the role of the physician. Was there any significant delay between first visit to a physician and diagnosis? Any differences between general practitioner and urologist?

I recommend thorough reading of this article.

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