

URO - ONCOLOGY : **Carcinoma of the Prostate**

PROSTATIC CANCER: PROGNOSTIC CRITERIA*

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The prognosis for any tumor is dependent on its grade and stage at the time of diagnosis. The clinical problem in prostatic cancer is the difficulty in determining accurately these factors.

Staging

T Category: There is a good correlation between size, the incidence of metastases and ultimate prognosis. Recent interest has focused on the increasing proportion of incidentally diagnosed carcinomas. Analysis of these cases shows two main groups - a) those where less than 10% of examined tissue is involved and b) those where more than 40% is involved¹. The prognosis for the former is excellent; those with the larger incidental tumor may progress and the grade must be considered.

N Category: There is good correlation between size of the primary tumor and the incidence of pelvic lymph nodes. A variety of reports confirm that at least 50% of patients with T3 tumors will have positive pelvic nodes². Methods for studying these nodes all have their limitations and a significant false negative rate. Pelvic lymph node dissection, though accurate, is not a minor procedure and should be restricted to those about to undergo an attempt at curative surgery.

M Category: The two main guides to metastatic prostatic cancer are serum acid phosphate and the radioisotope bone-scan. Other methods and markers, such as alkaline phosphatase, are less reliable. The main advantage of a radioimmunoassay for serum acid phosphatase is the increased reliability of the method; thus it is likely that very mildly elevated values can be accepted as evidence of pelvic lymph node involvement³. The prognosis for a patient with a positive bone-scan worsens with the increased extent of involvement. The prognosis is even worse when bone and soft tissue metastases are present.

Grade. For many years it was claimed that grading of prostatic cancer was of little value because of the heterogeneity of the tissue. Several grading systems have

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been devised including the Gleason system. Experience with this system, especially for early disease, has shown the value in correlating grade with prognosis. Thus if local tumors of poor grade are managed conservatively then they must be monitored carefully to detect any evidence of progression. In contrast, a focal lesion that is differentiated will have a very good prognosis.

REFERENCES

1. Chisholm GD. *Prostatic Cancer in Tutorials and Postgraduate Medicine Urology*. London: Heinemann Medical, 1983.
2. O'Donoghue EPN. Lymphography and pelvic lymphadenectomy in carcinoma of the prostate. *Br J Urol* 48:689, 1976.
3. Beynon LL, Chisholm GD. Unpublished data, 1984.

A COMMENT AND A QUESTION

Akdaş: — Serum C Reactive Protein when measured by radioimmunoassay method was found to be elevated in patients who had progression while on hormonal treatment, and it has a predictive value when you combine it with acid phosphatase measurements.

Avanoğlu: — When grading prostatic cancer, if you find out that there's a pattern of differentiation of the prostate, not well differentiated and not poorly differentiated but a pattern of mixture, what do you do?

Chisholm: — You must take the worst pattern. I think this has long been one of the problems with grading prostatic cancer, and for many years pathologists have refused to do this, because there were too many mixed appearances. But I think, it's not too surprising; if you take the worst pattern, that must represent the worst chances for that patient; you have to persuade your pathologist to do this.