
Paper

Prognostic factors associated with bladder tumours

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Abstract

Introduction: Transurethrally resected bladder tumours are at risk of recurrence and progression to invasive cancer.

Objectives: To assess factors which predict recurrence and progression in bladder tumours.

Methods: This retrospective analysis included 192 patients with bladder tumours treated at a urology unit in a tertiary care hospital in Sri Lanka with a mean follow up of 63.7 months (SD \pm 18.8, range 37-99 months). Follow up details were obtained from clinic records. Factors which were analyzed as possible predictors of tumour recurrence and progression included the tumour growth pattern, mitotic count, necrosis, lamina propria invasion, muscularis propria invasion, lympho-vascular invasion, focal pleomorphic areas, squamous differentiation, glandular differentiation, adjacent carcinoma in-situ and the tumour grade. Cox univariate and multivariate analysis was done together with a Kaplan Meier survival analysis.

Results and Conclusion: In the univariate analysis the tumour stage ($p=0.042$) and lamina propria invasion ($p=0.031$) were the only significant predictors of tumour recurrence. In multivariate analysis the most significant independent factor associated with tumour recurrence was lamina propria invasion ($p=0.02$), In Kaplan Meier survival analysis there was a significant difference in recurrence free survival (RFS) between the low grade urothelial carcinoma and the invasive group within the WHO/ISUP classification (log rank 4.78, $p=0.0287$). Only six cases progressed in stage or grade during the follow up period.

(Key words: Bladder carcinoma, prognostic factors)

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