

SHORT COMMUNICATION

Urinary Bladder Carcinoma: The lesson taken from the past and the future prospect

Hornak M, Bardos A, Galbavy S

Urologic Clinic with Kidney Transplantation Centre, University Hospital, Comenius University, Bratislava, Institute of Laboratory and Examination Methods, Faculty of Medicine, Comenius University, and Institute of Oncology St. Elisabeth, Bratislava, Slovakia. bl@fmed.uniba.sk

According to their depth of invasion, carcinomas of urinary bladder are classified as being superficial or invasive. Superficial carcinomas form 70–80 %, approximately 70 % of them is recurrent, and 10–15 % are progressive and grow into the muscular layer of the urinary bladder. Invasive carcinomas form 20–30 % of all carcinomas of urinary bladder and at the time of the diagnosis 50 % of patients suffer from metastases. The development of urinary bladder carcinomas is characterised by various, mutually coinciding processes. There remain the problem as to which superficial carcinoma is going to reoccur or progress, and which invasive carcinoma is going to form metastases. Current diagnostic procedures in patients with urinary bladder carcinomas are based on histological and pathological assessment of the grade of cellular differentiation as well as on that of the depth of invasion through the urinary bladder wall. Conventional histopathologic evaluation when compared with molecular changes in cells does not sufficiently assess the biologic behaviour of carcinoma. Only a small number of molecular biology procedures are available in current clinical practice.

Risk factors of recurrence and especially those of progression are considered to include multiple tumours, frequent recurrence (number of recurrences in one year), T1 stage, high malignancy grade (G3), current presence of carcinoma *in situ*, positive cytology of a hidden tumour, positive biopsy of prostate urethra, large size of tumour (>5 cm) and tumours refractory to BCG instillation. The prognosis of invasive carcinomas is assessed by the depth of tumour's invasion into the muscular layer and the presence of metastases within lymphatic nodes.

The authors see a possibility of urologists as to how to improve the treatment of superficial tumours in fractional removal of tumour specimens after transurethral resection of carcinoma (TUR-B); the presence of muscular layer in the removed tumour specimen, immediate instillation of cytostatic drugs following TUR-B after 2–6 weeks, and improvement of diagnosis *in situ*. The task of pathologists is to re-evaluate the presence of the pro-

pria muscularis layer within the specimen and to assess the extent of tumour in lamina propria layer according to so-called micro-stages, namely T1a, T1b and T1c, to establish a new classification of cellular differentiation and to evaluate the p53 percentage of positive cells. In invasive carcinomas, it is necessary to decide on the method of therapy already after the 1st cystoscopy and TUR-B and not to consider radical cystectomy to represent the last possible way of treatment, to widen the surgical treatment by lymphadenectomy, and in the stages exceeding the borders of urinary bladder to indicate chemotherapy.

Successful therapy of urinary bladder carcinomas is still being a challenge for urologists and oncologists. The treatment goals still remain the same, i.e. the replacement of the former tumour, prevention of recurrences and effective protection from progression of invasive tumours. In the anticipation of recurrences as well as in that of the result of therapy, the examination of molecular markers should be brought from research laboratories to the beds of patients. The trend of using multiple modes of therapy of invasive tumours has a growing tendency.*

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