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BLADDER CANCER: TREATMENT OF CARCINOMA IN SITU*

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Carcinoma in situ (CIS) of the bladder is by definition a grade III tumor. Howeyer the distinction between severe dysplasia of the urothelium and carcinoma *in situ* can be difficult. The surface cells are shed easily from CIS so that urine cytology can be helpful in this condition. CIS is not a single entity and may be considered under 3 headings.

1. Primary CIS with no other bladder lesion. This is a relatively uncommon form but has achieved importance because it has a sinister behavior and can progress while under observation[1]. The patient is almost always a male. Symptoms of outflow tract obstruction are common but in addition there may be penile or perineal pain. The bladder may appear normal or there may be red patches (malignant cystitis). It is acceptable to treat these patients with intravesical chemotherapy in the first instance, provided that there is no evidence of CIS in the prostatic urethra and provided that the follow-up is perfect. If there is no response to chemotherapy at 3 months, and the CIS is widespread, then cystourethrectomy is necessary. There is no place for radical radiotherapy in this condition. If the CIS involves only a small area and responds to chemotherapy then maintenance chemotherapy should be continued.

2. CIS associated with established bladder tumor. Urothelial abnormalities are commonly associated with a proliferative tumor[2-3]. If the main tumor is infiltrating muscle, then treatment, (radiotherapy and or cystectomy) will be directed at this. If the main tumor (s) involves the lamina propria (T1) or superficial muscle (T2), the exophytic tumor will be resected in the usual way and then the associated mucosal CIS will require chemotherapy together with close follow-up. Failure to respond to this regime may be followed by radiotherapy for the infiltrating tumor with or without subsequent cystectomy.

3. CIS involving the prostate/prostatic urethra. CIS may be detected in the prostatic ducts when the prostatic urethra is resected. Management will depend on the state of the bladder urothelium. It may be possible to resect fully the posterior urethral tissues and use chemotherapy for the bladder: but because this form of CIS

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is difficult to monitor, a cysto-urethrectomy may be preferred as primary treatment. CIS may have already progressed to involve prostatic tissue: this needs to be distinguished from invasion from a lesion on the bladder base (T4a)[4]. In general, if the patient is fit for radical surgery then this is the preferred treatment.

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