**The Role of Virtual C.T Cystoscopy as a Valuable Diagnostic Tool in the Follow-up of Patients with Non-Muscle-Invasive Bladder Cancers**

**Introduction and Objective:** The value of virtual C.T cystoscopy in the follow-up of patients with non-muscle-invasive (TaT1) bladder cancers and its accuracy in comparison with conventional cystoscopy.
**Materials and Methods:** It is a prospective clinical trial comparing virtual cystoscopy to conventional cystoscopy in terms of detecting recurrent non-muscle-invasive bladder tumors. The study was conducted at Kasr ElAiny Hospitals, Cairo University from 1/1/2011 until 1/1/2012. Twenty procedures were done during this period for 15 patients with history of non-muscle-invasive (TaT1) bladder cancers who had undergone transurethral resection (TUR) of their lesions. Fourteen of these patients were males and only 1 female with ages ranging from 48 to 83 years. Patients were either asymptomatic presenting for their scheduled check cystoscopy, or who became symptomatic during the period of their follow-up or those who missed their follow.
**Results:** Conventional cystoscopy, being detected 16 masses in 12 procedures. Eighty one % of these bladder masses were found to be malignant (13 of the 16 masses were positive for malignancy). Virtual cystoscopy detected only 10 masses out of 16 with sensitivity 62.5%. Its sensitivity in the detection of bladder masses increased as the size of the mass increased. It detected all masses greater than 4mm (100% sensitivity). It is worth mentioning that all of the masses detected by virtual cystoscopy were found out to be malignant (100% specificity). It was able to detect 77 % of malignant masses. Its negative predictive value for detection of malignant bladder masses is 67%.
**Conclusions:** Virtual cystoscopy may be incorporated in the follow-up of patients with non-muscle-invasive bladder cancers especially patients at low risk of progression where recurrent tumours do not convey immediate threat to the patient's life. It may encourage patients to be more compliant with their follow-up schedule as it does not require anesthesia, causes less discomfort, is less costly and avoids complications associated with cystoscopy (as infection, bladder perforation and urethral stricture).