INTRODUCTION

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Carcinoma of the urinary bladder is one of the more common malignant tumors of the urinary tract in both male and female patients **(Barentsz et al., 1996)**. Worldwide, bladder cancer was responsible for an estimated 132,432 deaths in 2000. Survival from this disease appears to be less in black populations and in women as compared to white men, despite their lower incidence in these populations, possibly because they seek treatment at higher stages of the disease **(Borden et al., 2003)**. Bladder cancer is the fourth most common tumor in men accounting for 6% of all cancers in men. Epithelial tumors account for more than 90% of all bladder tumors **(Husband, 1995).**

In Egypt, the condition is worse as a result of Bilharisiasis. Bilharisiasis is not only endemic in our country but also considered to be historical disease as tit has been discovered in the urinary bladder of pharaoh ancestors mummies. The uncommon aggressive squamous cell carcinoma is frequently associated with bilharasial bladder **(El-Bolkainy et al., 1981).**

In bladder cancer, tumor stage is a more reliable prognosticator than is grade and any evidence of muscle invasion markedly lowers survival **(Kuroda et al., 1988).** It is therefore essential to establish the stage of bladder tumors, not only to select the appropriate treatment but to predict prognosis. Noninvasive imaging findings can be extrapolated to staging, and accurate staging undoubtedly contributes to the choice of surgical treatment, such as transurethral resection or total cystectomy with urinary diversion **(Tanimoto et al., 1992)**.

Various diagnostic methods, including bimanual examination with the patient anesthetized, cystoscopy, cystoscopic biopsy, intraluminal or transabdominal ultrasonography, computed tomography (CT), and magnetic resonance (MR) imaging,are being used for preoperative staging of bladder cancer. Clinical staging is often inaccurate, and understaging is common **(Richie et al., 1992)**.

Although a histologic diagnosis is usually established with cystoscopic biopsy, imaging modalities such as CT and MR imaging are commonly used for the staging of bladder cancer (**Kim et al., 1994**). A wide mange of accuracy in staging has been reported for CT (40%-92%) and for conventional and contrast material-enhanced MR imaging (50%-96%) **(Nanumi et al.,1993)**.

The value of magnetic resonance (MR) imaging in analyzing the male and female pelvis, specifically in demonstrating normal and benign pathologic conditions of the urinary bladder, has been reported **(Fisher et al., 1985)**.MRI offers several advantages over other imaging modalities including CT such as multi-planar imaging with better detection of tumors, better tissue characterization ,superiority in evaluation of prostatic or seminal vescicles invasion in addition to better differentiation between post biopsy effect and the tumor itself. MRI protocols were applied in this field **(Tanimoto et al., 1992)**. However, recently, staging with dynamic contrast-enhanced MR imaging has been shown to be superior to both CT and conventional MR imaging **(Barentsz et al., 1999).**