

INTRODUCTION

The urinary system was one of the first systems to be evaluated with ultrasound. Recently, the development of high-resolution, real time transducers and their placement into sonoendoscopic probes have made ultrasound an accepted and accurate modality for the diagnosis of disorders of the lower genitourinary system (Coleman, 1998).

Improvement in technology now makes possible detailed examination of the bladder by ultrasound. Several ultrasonic techniques have been used to assess bladder abnormalities including transabdominal (Suprapubic), transrectal and transurethral scanning (Resnick and Kursh, 1986). They play a major role in the diagnosis and staging of urological tumors (Braeckman et al, 1987).

Transabdominal ultrasonography of the bladder is not limited to special indications but should be considered an integrated part of the urologic sonographic evaluation of the genitourinary tract. Information about many pathological conditions (e.g. stones, tumors and diverticula) is obtained without delay, without need of instrumentation or exposure to x-rays (Walz and Bertermann, 1990).

It is obvious that accurate detection and staging of the extent of urinary bladder carcinoma is critical for planning

appropriate management and discussing prognosis with the patient (Abou Yousef, 1986).

The clinical assessment of patient with bladder tumor includes excretory urography and cystoscopy. In addition to bimanual examination and transurethral biopsy of the tumor to determine the extent of the tumor through the bladder wall. However, the information obtained by cystography or cystoscopy is rather limited to the mucosal surface of the bladder. Therefore, ultrasonography is expected to have an important role in defining the tumor extension through and outside the bladder wall (Enany et al., 1998).