Introduction

Acute flank pain is a common clinical problem. Patients with acute flank pain undergo several imaging studies to detect the presence of urinary stones and associated uretral obstruction. IVU was traditionally used to give informations about the size, location of the stone and the degree of ureteral obstruction and renal function. Recently, the use of NCHCT is more effective in detecting calculi and also can reveal associated extrarenal pathology **(Boridy et al., 1998).**

CT is sensitive to pelvicalyceal system dilatation which is seen as central collection of communicating structures of fluid density so, the dilated ureter can be followed to the level of obstruction. CT is also sensitive to retroperitoneal causes of obstruction (lymphadenopathy , tumours , fibrosis) and urinary calculi including non opaque stones which appear as a lucent filling defect on IVU **(Abramson et al., 2000).**

The introduction of spiral CT has announced a new era in the radiographic assessment of urinary calculi. The speed, safety and accuracy of spiral CT makes it, the method of choice in assessment of patients with suspected urinary tract calculi. Spiral CT reveal urinary calculi more accurately than standard radiography, ultrasonography, nephrotomography and excretory urography, it also, can accurately differentiate distal uretric calculi from pelvic phleboli **(Fielding et al., 1999 and Saw et al., 2000).**

Spiral CT can be used in place of excretory urography to plan treatment of patients with flank pain caused by obstructing uretral stones. Stones that are larger than 5mm, located within the proximal two thirds of the ureter and seen on two or more consecutive CT images are more likely to require endoscopic removal, lithotripsy or both. **(Fielding et al., 1998 and Niall et al., 1999).**