*INTRODUCTION AND AIM OF THE WORK

Digital subtraction angiography is a relatively new technique for radiographic imaging of arterial anatomy following the injection of contrast material into a peripheral vein. This concept was originally proposed in 1939 by Roob and Steinberg; however, its usefulness was limited by the need for large doses of contrast and the relative insensitivity of standard radiographic film to small attenuation differences between tissues and contrast material. DSA has developed from advances in digital image processing, which, combined with radiographic techniques used in computed tomography, have yield contrast resolution ability previously not possible.

The increased contrast resolution afforded by computerized digital subtraction angiography allows visualization of arterial images following intravenous injection of contrast material. Intravenous DSA has been demonstrated to be an effective, safe procedure for the evaluation of many renal vascular disorders (Kaufman et al., 1984). This ability also allows excellent visualization of the renal parenchyma with low doses of contrast material when digital subtraction imaging is obtained after direct intra-arterial injection (Zabbo et al., 1985).

Digital subtraction imaging combined with ultrasonography or computerized tomography scaning yields satifactory diagnostic and anatomical information for most patients with renal masses (Zabbo et al., 1985).

The aim of the present study is to evaluate the role of DSA in renal masses, its advantages, limitations and accuracy in identification of the nature of the renal mass as a preoperative diagnostic method.