Role of digital subtraction angiography in evaluation angiography in evaluation of renal masses

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The prsent study was performed in order to asses the value of DSA as a diagnostic methods in renal masses.The material consisted of 30 Patients 20 cases were diagnosed as renal masses by ultrasound and 10 cases after intravenous urography and ultrasonography.The diagnosis of malignancy can be achieved in 92 % of the suspected malignancy renal tumours (23 out of 25 cases). 14 cases were hypervascular and 6 were hypovascular hypernephroma. 2 cases were diagnosed as Wilms' tumour and one case as renal pelvic tumour.One case of angiomyolipoma (hamartoma) was misdiagnosed as hyper-vascular tumour. Another case was msdiagnosed as hypovascular tumour and proved to be perinephric abscess.IA-DSA was carried out in the 6 cases of hypovascular tumour; response to epinephrine was noted in 4 cases.Two cases were diagnosed as renal cysts. One of them showedcalcification and subjected to IA-DSA.Two cases could be diagnosed as renal abscess and one as a pseudo tumour (fibrolipomatosis of the renal hilua). Infilteration of the renal vein could be identified in 2 cases.So, in this work the overall accuracy rate was 93 %. The vascular details of all cases were described.-108-by patiens and lower radiation dosage. IV-DSA is less invasive than standard catheter arteriography and can be performed as an out patient study .Even in IA-DSA the catheter size and the volume of contrast medium could be reduced significantly and most patients could bo to home at short time after the -examination.With such technique it is also possible to combine IV-DSA, con ventional IVU and digital subtraction vena cavography and with only one application of contrast medium.On the other hand low contrast, low spatial resolution and superimposition of other vessels preclude the demonstration of small renal vessels, distal to the interlobar branches, In some cases.In conclusion, digital subtraction imaging combined with excre-tory urography, ultrasonography or CT scanring yields statisfactory diagnostic and anatomical information for most patients with renal masses. Even in small tumours, this combination is sufficient for an operation.