Summary and Conclusion

It is estimated that approximately l millions persons in United States have potentially correctable vascular hypertension. Additionally, a significant percentage of those patients with potentially correctable hypertension are at risk for progressive renal insufficiency in addition to their hypertension. The potential etiologies for this condition included atherosclerosis, fibromuscular dysplasia, and neurofibromatosis and Takaysu's arteritis. In a middle-aged patient with evidence of atherosclerotic disease elsewhere, atherosclerosis is considered the most likely etiology. Over the past decades, **DSA** has become a well-established modality for the visualization of blood vessels in the human body. This technique remain; the criterion standard for the confirmation if and identification of renal artery occlusion in persons with I intrinsic renal disease (**IRD**), Continued improvements in imaging technology have changed many of the traditional diagnostic algorithms for evaluating renal artery disease. Newer imaging modalities offer more accurate, specific, and early diagnosis but can be time consuming and Costly less invasive modalities, such as ultrasound, computed tomography, and magnetic resonance imaging have widespread applications in practice. The risks of radiation exposure, contrast toxicity, and sedation or versus the potential benefits, of obtaining precise diagnostic information always bet considered before selecting any imaging procedure.

Renal magnetic resonance (MR) angiography allows accurate evaluation of patients suspected to have renal artery stenosis the risks associated with nephrotoxic contrast agents, ionizing radiation, or arterial catheterization. With the availability of simpler, safer, less expensive, but still accurate contrast materia1-enhanced MR. Arteriography, screening for

renal artery stenosis can be expanded to a broader spectrum of patients.

Computed tomography (CT) is also promising but is limited by the risks associated with iodinated contrast material and ionizing radiation. **Ultrasonography** (US) has been considered promising because it is noninvasive and inexpensive and provides how information from which homodynamic effects can be inferred. However; the use of US a screening tool for renal artery stenosis has been limited by the need for experienced operators, a variable failure rate, and controversy over the usefulness of the flow information.

Color Doppler US has some limitations; the accessory vessel detection is low. Moreover, the sensitivity and the negative predictive value, acceptable, is significantly lower than those for MR angiography. Improved US technology, such as the use of US contrasts agents may have a role to play in the future.**Renal scintigraphy** with angiotensin converting enzyme inhibitors is a sensitive and specific way to screen patients with suspected renovascular hypertension.

In conclusion

The main challenge is not to detect all cases of RAS 50% or greater in diameter but to identify stenosis that will benefit from revascularization. Another major issue is avoidance of unnecessary diagnostic angiography, especially in patients with renal failure. The proposed screening should begin with a functional investigation such as Doppler US or scintigraphy. In a center with good expertise with Doppler US, the cost-effectiveness of this technique is probably superior to that of scintigraphy. MR angiography, with its higher cost and lesser availability, should be reserved for patients with indeterminate functional imaging results, patients with normal functional