INTRODUCTION

An end stage renal disease is a condition in which kidneys are unable to filter wastses from the body, maintain the proper balance of water and chemicals,or produce urine.It can occur in anyone with an illness or injury that affects the kidneys.The most common causes include high blood pressure ,diabetes mellitus,polycystic kidney disease,obstruction of the urinary tract,glomerulonephritis,certain cancers,autoimmune disorders,such as S.L.E.,and diseases of the heart or lungs. (Penn state Nephrology :October 2006,page 1&2: chronic renal failure).

Kidney transplantation is the treatment of choice for many patients with end stage renal disease.
A successful kidney transplant can improve the quality of life and reduce the risk of death for many patients who receive dialysis.In addition,patients who undrgo transplantation are free of time-and energy-consuming requirements of kidneys.
(American Journal of kidney Dis.March 2004.Stanislao Morgera,Torsten Slowinski,Ortrand Vargas Hein.)

However,renal transplantation may be followed by a number of complications.The most frequent complications include perinephric fluid collection(hematomas,seromas,urinomas,lymphoceles,and abscesses),decreased renal function(acute tubular necrosis,rejection and drug nephrotoxicity);and abnormalities of the vasculature(renal artery and vein stenosis or thrombosis and A.V.F.) ,collecting system(urinary tract obstruction),and renal parenchyma(pyelonephritis,infarction,or rejection).

Ultrasonography(US)is often the imaging method chosen for transplant evaluation early in the postoperative period,and it can be used for long – term follow-up as well.US also is used to guide diagnostic and therapeutic interventions,such as biobsy or fluid aspiration when complications of transplantation develop.(Radiographics.2006;20:1-27.Elizabeth D.Brown,M.D.& Michel Y.M.Chen,M.D.).

Colour Duplex sonography is the most easy and rapid non invasive investigation to evaluate vascular complications and perfusion of the

transplanted kidney.It is an excellent method for screening patients suspected to have renal artery stenosis and can help select which of those patients should undergo digital subtraction arteriography.(Journal of clinical ultrasound,March & April 2003.Ruth Helena de Moris ,Valdair Francisco).