Renal cortical changes

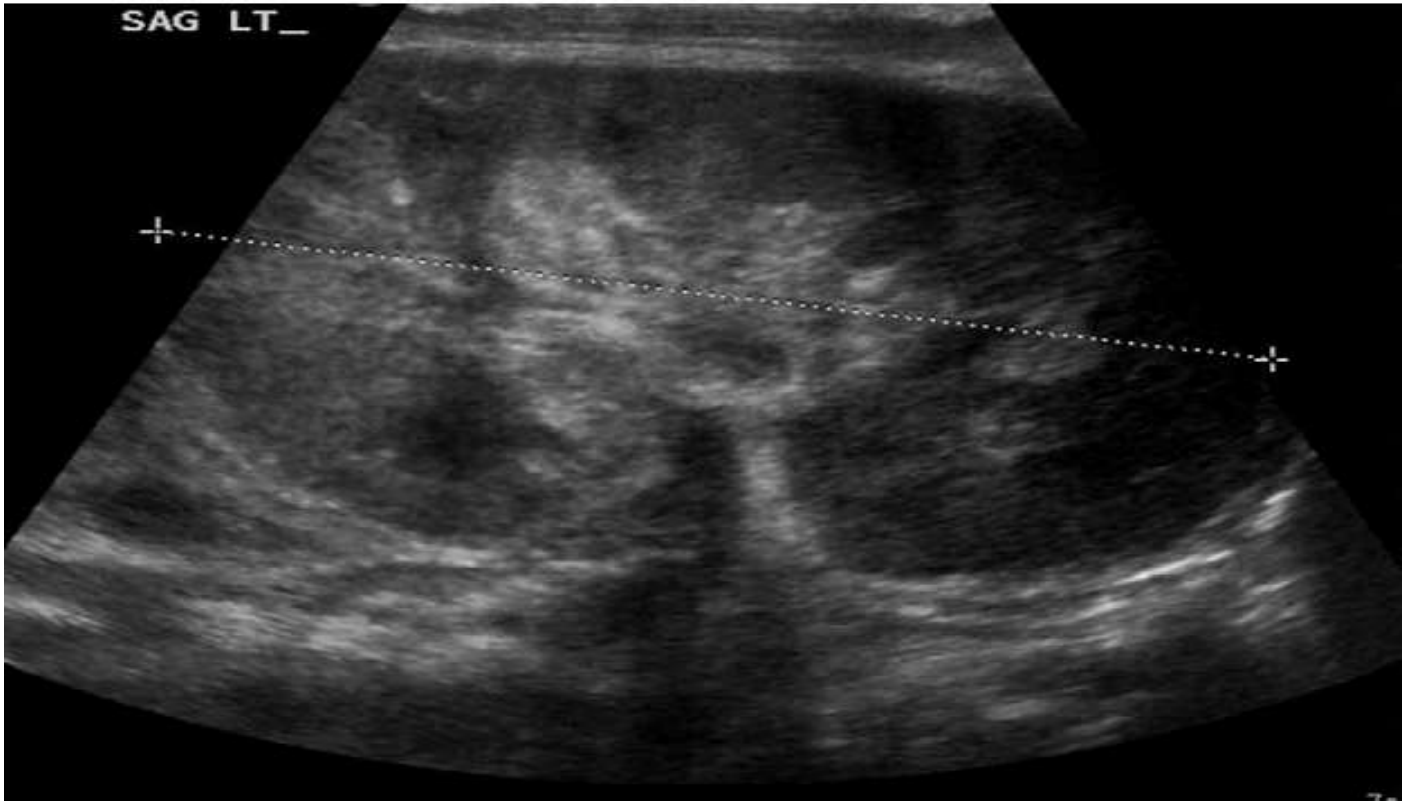
Assessment of cortical reflectivity by compared cortex to that of the adjacent liver or spleen and an estimate made of whether the reflectivity was less than, equal to or greater than the liver or spleen.

Normal cortex is generally less reflective than the liver or spleen.

In acute nephropathies the cortex may swell and increase in thickness.

Renal cortical changes

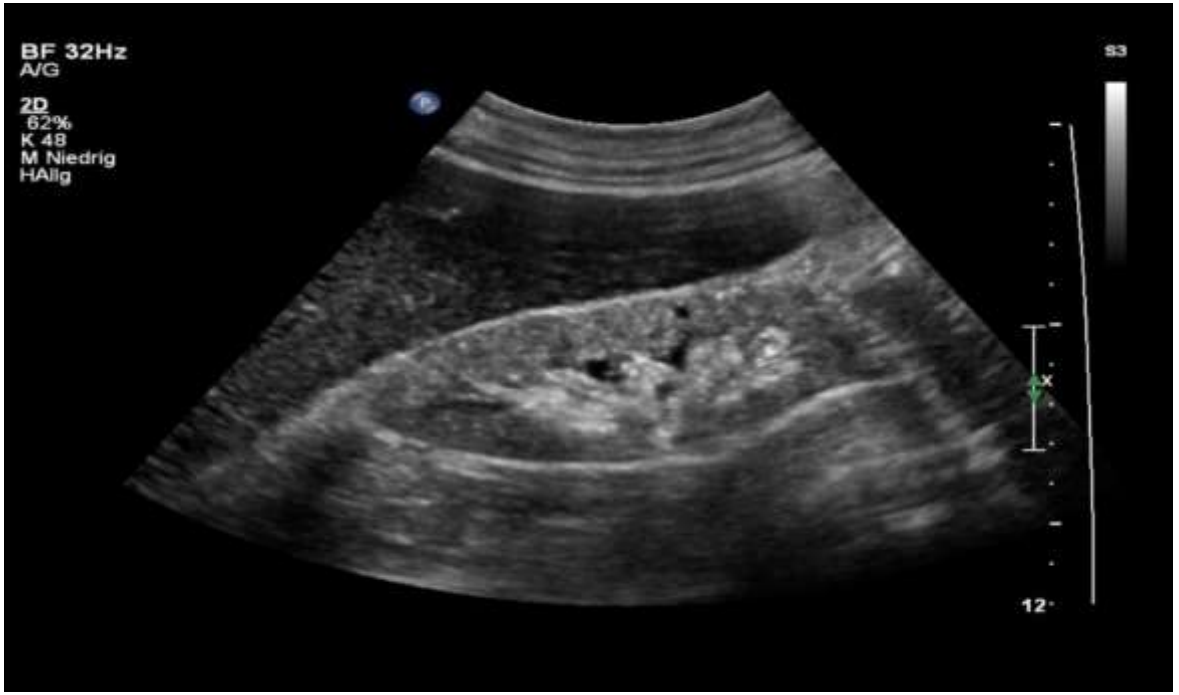
The cortical reflectivity may be reduced in acute nephropathies as in acute renal vein thrombosis.



Renal cortical changes

or markedly increased cortical reflection as in some cases of acute glomerulonephritis and acute interstitial nephritis.

GN



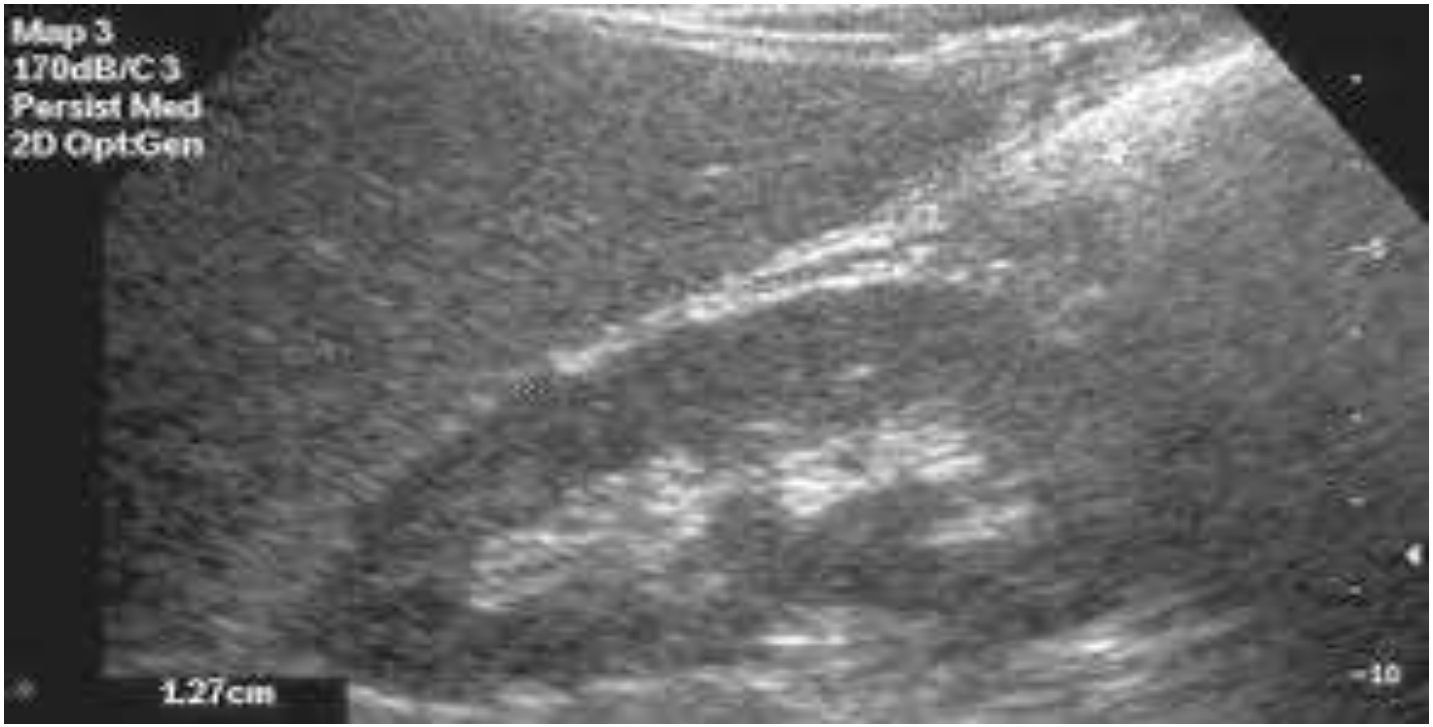
Renal cortical changes

- In extreme cases of disease the reflectivity of the cortex can be similar to the renal sinus

Medullary changes and corticomedullary differentiation

The medullary pyramids may be more prominent in many cases of parenchymal disease due to increased cortical reflectivity.

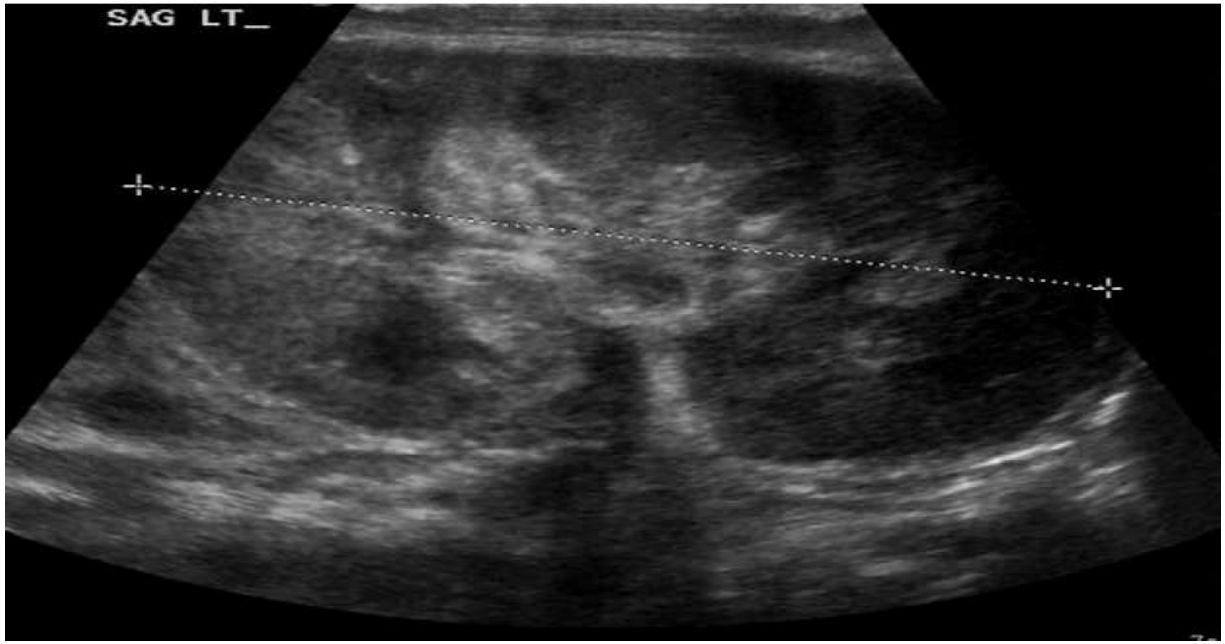
If there is decrease in the degree of cortico medullary differentiation so that the pyramids are poorly defined.



Vascular disorders

- **1- Renal vein thrombosis.**
- **it may be seen in up to 40% of septic or dehydrated infants and rare in adult.**
- **It is generally unilateral or restricted to one segment.**

- **Sudden complete occlusion of the main renal vein produces an enlarged, echo-poor kidney.**



- **After 10–14 days the kidney starts to shrink and over a period of 1–2 months this results in a small kidney with abnormally high reflectivity**

2- Renal artery stenosis

- **Narrowing of the renal arteries can cause hypertension.**

- **Kidney seen decreased in size with normal cortical reflectivitiy**