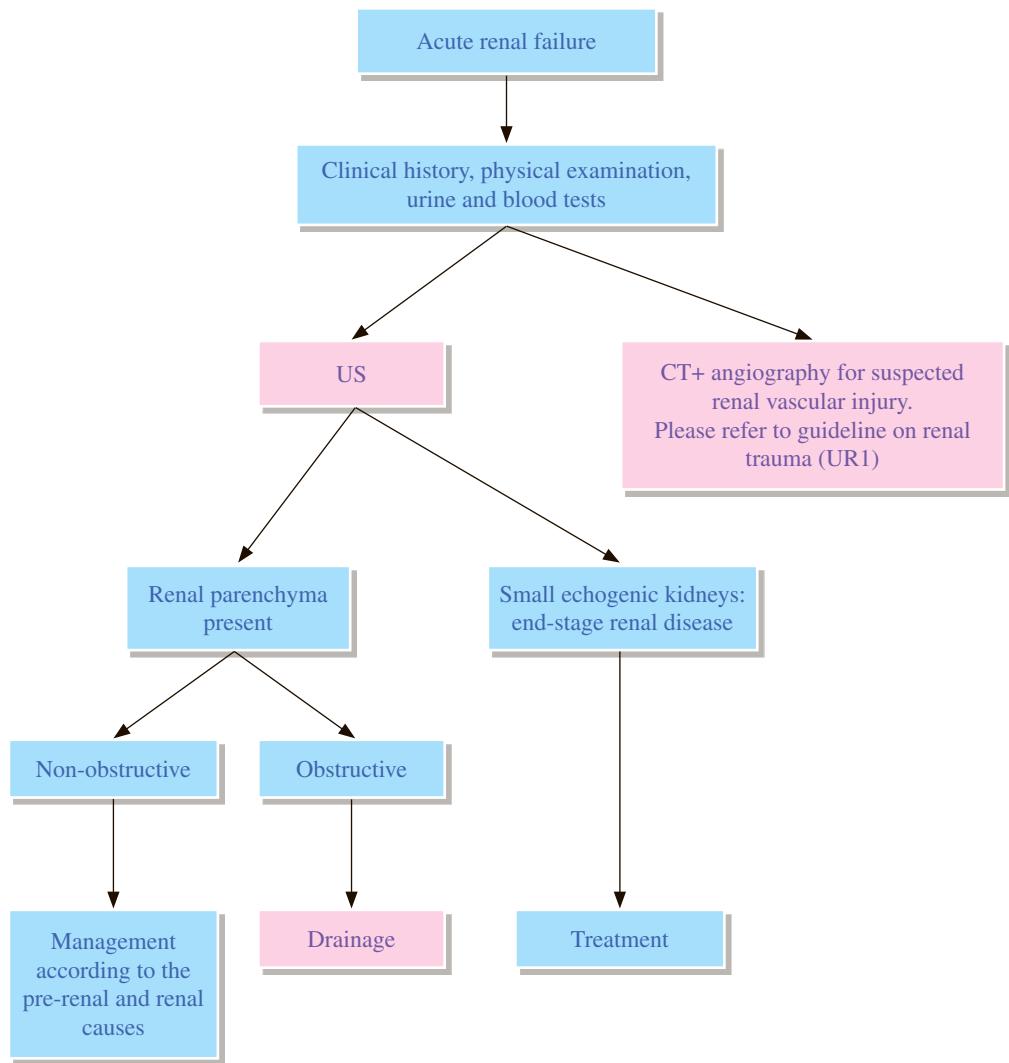


UR 3 Acute renal failure



REMARKS

1 Intravenous urogram (IVU)

1.1 IVU has no role in acute renal failure.

2 US

2.1 US should be the initial imaging study. It helps to differentiate potentially reversible acute renal failure from chronic end-stage renal disease. In cases of chronic renal failure, US can define the renal sizes and their echogenicity, presence of pelvicalyceal dilatation and cystic disease.

2.2 Colour Doppler US can be used to assess the renal arterial supply and venous drainage.

3 Nuclear medicine

3.1 Renal scan provides assessment of global and differential renal function which may reflect the potential reversibility of the renal failure. It is generally not useful in clinical decision making.

4 CT

4.1 CT is of value for ruling out stone disease, surveying the retroperitoneum for masses in patients with suspected post-renal cause of dysfunction.

5 MRI

5.1 In hypertensive patients or in those with extensive peripheral atherosclerotic vascular disease, magnetic resonance angiogram (MRA) with/without contrast is useful for detecting renal artery stenosis when duplex Doppler US is negative or non-diagnostic.

6 Pathological diagnosis

6.1 Percutaneous US-guided renal biopsy yields tissue for pathological examination in patients with intrinsic renal dysfunction, such as glomerular, vascular or tubulointerstitial diseases.

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