SUMMARY AND CONCLUSION

Adrenal lesions in children may manifest as an abdominal mass or as an endocrine diseases. The role of diagnostic imaging in the former case it to differentiate between renal and adrenal masses; in the latter case, the role of diagnostic imaging is to lateralize the source of endocrinopathy to one or both adrenals. During the past decade, cross sectional imaging techniques, such as ultrasoungraphy (US), computed tomography (CT), and magnetic resonance (MR) imaging, have replaced intravenous urography and other more invasive radiographic techniques for evaluation of adrenal abnormalities in children. Initial diagnosis of an adrenal mass in a child is made with US, which is also used to document regression of uncomplicated neonatal adrenal haemorrhage. Also, US can allow timely detection of the rare neuroblastoma in the neonates. The imaging approach in a child of any age with an endocrine syndrome is dictated by the result of the biochemical evaluation. US allows lateralization of the source of excess hormone production to one or both adrenal gland. The older child with a palpable flank mass is first evaluated with US and when a solid mass is detected, especially when the appearance is that of neuroblastoma or the origin of the mass is indeterminate, MR imaging is used for preoperative staging. The ability of MRI to image in multiple planes often facilitates definition of the organ of origin of the tumour. MRI demonstrates blood vessels more clearly than CT, and this is extremely valuable in determining the surgical respectability of the tumour mass. CT however, has the advantages of being less expensive and more available and has larger clinical experience with adrenal pathology imaging and the ability to perform biopsy procedures.