Summary and conclusion

Liver transplantation is widely accepted as an effective therapeutic modality for a Variety of irreversible acute and chronic liver diseases for which no satisfactory therapy is available.

The commonest indications of liver transplantation in infants and children are extra hepatic biliary atresia , metabolic disorders and primary hepatic malignancy ,while in adults are primary biliary cirrosis , chronic active hepatitis and primary malignancy of the liver.

Postoperative problems , such as bile leaks, surface bleeding and vascular complications, have been significant in liver transplantation. Vascular complications , such as arterial thrombosis and outflow obstruction, may lead to loss of valuable grafts. Long term biliary and vascular complications both cause significant morbidity and mortality. Such complications must be minimized.

Advances in the field of percutaneous, radiological, minimally invasive techniques have increased the importance of interventional radiology in the management of patients after LT. Interventional radiology procedures are used in the treatment of vascular and non-vascular complications, improving graft and patient survival and avoiding, in the majority of cases, surgical revision and/or retransplantation.

Imaging plays an important role in the diagnosis of liver transplantation complications. Imaging professionals should be familiar with the most important complications and the applicability of each modality. Because of the wide spectrum of possible complications and the inherent complexity of the anatomy in liver transplant recipients, there is frequently a need to tailor the postoperative imaging evaluation to the individual clinical scenario. A multimodality approach often is recommended to determine the type and location of a complication and the most appropriate method of management.

Many postoperative complications are amenable to the ever-enlarging scope of interventional radiology as well. Every surgical anastomosis — arterial, portal venous, IVC, and biliary — is accessible to some degree to interventional therapy. Abnormalities of the biliary tree and fluid collections are also well suited to percutaneous approaches. These procedures, all performed percutaneously with local anesthesia and intravenous sedation, offer a safer, less invasive alternative to traditional open surgery.