

Appendix 3: A brief summary of some of the main features of Rejection post liver transplant

Previous terminology	Preferred terminology	Principle histological features	Diagnostic methods	Management
(Acute) cellular rejection	T-cell mediated rejection (TCMR) Early defined as <6 months Late defined as > 6 months	Portal inflammation Bile duct inflammation damage Venous endothelial inflammation Centrilobular inflammation and necrosis (in severe cases)	Liver function tests Liver biopsy	High doses of pulsed steroids Consider MMF if not already on the drug Increase target drug levels for CNI therapy
(Acute)humoral rejection	(Acute) antibody mediated rejection (AMR)	Microvasculitis Portal eosinophilia Portal vein endothelial hypertrophy Eosinophilic venulitis	Liver function tests Immunology Liver biopsy All four criteria required for definite diagnosis: 1. Compatible histology 2. Positive serum DSA 3. Diffuse (>50%) C4d staining 4. Exclusion of other possible causes	Treat as TCMR rejection in mild forms Moderate to severe – consider plasmapheresis and IVIg with or without anti B-cell therapy.
Chronic rejection	Chronic rejection	Bile duct loss Loss of arterioles in portal tracts. Obliterative arteriopathy in large and medium-sized arteries. Cholestasis in late stages.	Liver function tests Liver biopsy	Consider MMF if not already on the drug Increase target drug levels for CNI therapy. Consider anti B cell therapy in cases of “acute ductopenic rejection”