

CAUSES OF ALLOGRAFT DYSFUNCTION

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Liver graft dysfunction can happen any time after transplantation; if not identified early and treated promptly, it can lead to graft loss. The most common presentation is an asymptomatic elevation of liver enzyme levels. Early after LT, acute cellular rejection is the most common cause of graft dysfunction and is usually treated by increasing the dose of immunosuppression, which includes pulsed-steroid therapy for 3 days or more depending on the degree of rejection. The other common reasons for graft dysfunction are the vascular complications, bile leak or bile duct obstruction, post-transplant infections and drug toxicity. Even if rejection is suspected, it is important to rule out any vascular or biliary complications by performing a Doppler ultrasound scan and, if there is any doubt, a contrast-enhanced CT scan. Liver biopsy is usually performed through a percutaneous route, but a coagulopathic patient might need transjugular liver biopsy. LT patients are followed up more frequently in the first 3 months after transplant, as this is the time when presentation with graft-related issues is most common and also when monitoring and optimisation of immunosuppression are crucial. The follow-up protocol varies between LT centres, but mostly includes once a week for the first 6 weeks after transplant and then once a fortnight for another 6 weeks, before reducing the frequency of appointment. Late graft dysfunction is usually due to acute/chronic rejection, vascular issues such as hepatic artery stenosis or venous outflow obstruction, biliary obstruction, recurrence of primary disease such as hepatitis C (rare nowadays owing to viral clearance prior to transplant), autoimmune diseases or NAFLD, and other opportunistic infections such as CMV or herpes simplex hepatitis.

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