

Documents

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Abstract

Small-for-size syndrome (SFSS) following living donor liver transplantation is a complication that can lead to devastating outcomes such as prolonged poor graft function and possibly graft loss. Because of the concern about the syndrome, some transplants of mismatched grafts may not be performed. Portal hyperperfusion of a small graft and hyperdynamic splanchnic circulation are recognized as main pathogenic factors for the syndrome. Management of established SFSS is guided by the severity of the presentation with the initial focus on pharmacological therapy to modulate portal flow and provide supportive care to the patient with the goal of facilitating graft regeneration and recovery. When medical management fails or condition progresses with impending dysfunction or even liver failure, interventional radiology (IR) and/or surgical interventions to reduce portal overperfusion should be considered. Although most patients have good outcomes with medical, IR, and/or surgical management that allow graft regeneration, the risk of graft loss increases dramatically in the setting of bilirubin >10 mg/dL and INR>1.6 on postoperative day 7 or isolated bilirubin >20 mg/dL on postoperative day 14. Retransplantation should be considered based on the overall clinical situation and the above postoperative laboratory parameters. The following recommendations focus on medical and IR/surgical management of SFSS as well as considerations and timing of retransplantation when other therapies fail. © 2023 Lippincott Williams and Wilkins. All rights reserved.

Index Keywords

alanine aminotransferase, aspartate aminotransferase, beta adrenergic receptor blocking agent, bilirubin, diuretic agent, esmolol, octreotide, opiate, prostacyclin, prostaglandin E1, rifaximin, somatostatin, somatostatin receptor, tacrolimus, vasopressin receptor, bilirubin; acute graft rejection, acute kidney failure, Article, artificial ventilation, bilirubin blood level, cholestasis, graft failure, hemodialysis, hemodynamics, hepatectomy, human, human tissue, hyperammonemia, hyperbilirubinemia, hypertension, hyponatremia, hypovolemia, immunosuppressive treatment, inflammation, kidney function, liver biopsy, liver cirrhosis, liver failure, liver regeneration, liver transplantation, liver weight, multiple organ failure, outcome assessment, pathophysiology, plasmapheresis, portal vein blood pressure, recanalization, retransplantation, sepsis, small for size syndrome, splenectomy, treatment failure, consensus, laboratory, living donor, syndrome; Bilirubin, Consensus, Humans, Laboratories, Liver Transplantation, Living Donors, Syndrome

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