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Hepatology Highlights

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Do older patients utilize excess health care resources after liver transplantation?

Shankar N, et al.[1] The aim of this study was to determine if patients ≥ 60 years of age utilize more health resources following liver transplantation compared with younger patients. The authors found that recipients ≥ 60 years of age have similar lengths of hospitalization, re-operative rates, need for consultative services and readmission rates following liver transplantation, but have longer lengths of stay in the intensive care. The importance of this study is because elderly patients with cirrhosis are at increased risk of having co-morbidity conditions that complicate its management, and cirrhosis in the elderly is a cause of increased mortality from both hepatic and non-hepatic causes.[2] In fact one of the most important factors in the outcomes in the elderly patients is the pre-transplant evaluation of the older transplant candidate differs from that of a younger patient because of the increased prevalence of medical co-morbidities.[3] While certain elements of the pre-transplant evaluation are routine for all patients, others are determined by comorbidity conditions common to the elderly patient. The pre-transplant evaluation of a potential liver transplant candidate, especially the elderly patient, is increasingly multidisciplinary in nature, under the direction of a transplant hepatologist and liver transplant surgeon.[3]

In the present study authors found that patients in both groups had comparable MELD scores at time of transplant, underlying diagnoses, location pre-LT and donor characteristics. However, surprisingly the percentage of patients with hepatitis C was higher in recipients ≥ 60 than those with age < 60 years. Also, the authors found that pre-existent DM was noted to be more common in the older recipient group compared to a younger adult population. Finally, the main limitation of this study is the sample size and also that study was carried out in a single centre.

Should donation after cardiac death liver grafts be used for retransplantation?

Perry DK, et al.[4] This study was carried out to review the author's program's experience, specifically addressing peri-operative complications and short- and long-term outcomes of patients who received donation after cardiac death (DCD) liver grafts for liver re-transplantation (LR). The authors studied between February 1998 and June 2010, 211 patients underwent liver transplantation using DCD liver grafts; of those10 patients underwent LR with DCD grafts. Mean recipient age was 50.9 years (range 48-69). Mean MELD scores at the time of LR was 25.6 (range 10-40). The authors concluded that utilization of DCD liver grafts for LR resulted in poor patient outcomes in recipients with moderate to high MELD score. This is a very interesting study and deserves some comments. Firstly, although there is few information related with this topic, the sample size in this study is small and it needs more work. Secondly, it has been suggested that biliary complications are one of the main complications of patients receiving DCD-LT. In this study only one presented this complication. The usual biliary complications of conventional DBD liver transplants are mainly technical; they occur at the anastomosis and include strictures or localized bile leaks.[5] Also it has been proposed that these complications are almost

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always resolvable (surgically or by ERCP), and only rarely affect graft or patient survival.[5]

LT has become the standard of care for end-stage liver disease. However, given the ever-growing waiting list, shortage of organs has become a considerable problem. Unfortunately, currently there are some factors that can influence on the function of livers that are recovered from DCD donors undergo variable periods of hypoperfusion between extubation and asystole, and another period of no perfusion between asystole and cold flush.

Danazol improves thrombocytopenia in HCV patients treated with peginterferon and ribavirin

Cabrera-Álvarez G, et al.[6] The aim of the present pilot clinical trial was to evaluate the efficacy, tolerability and safety of Danazol for increasing and maintaining platelet levels in chronic HCV patients receiving PEG-INF and ribavirin treatment. Authors studied patients whose platelets were under 90,000/mm^3 and who were undergoing antiviral treatment. Danazol (300-600 mg/day) was administered during and until the end of antiviral therapy [7.6 months (2 to 11 months)]. They found that treated patients (forty-nine) receiving a combined therapy of PEG-INF, ribavirin and danazol increased their platelet levels to 121,081/mm^3 (46,000-216,000/mm^3); 10.6% of patients gained more than 100,000 platelets/mm^3, and 71% of patients maintained their initial platelet levels. Sustained viral response (SVR) was achieved in 63% of patients. Sustained virologic response SVR rates were high in patients with genotype non 1 (78.7%) and decreased in patients with genotype 1(60.1%). This study is interesting because the main goal of medical treatment in patients with chronic hepatitis C, is to reach SVR following treatment with interferon alfa plus ribavirin can result in stabilization or regression of fibrosis in approximately 90% of patients.[7] The benefits of attaining SVR are evident even among patients with hepatitis C virus-induced cirrhosis. Thrombocytopenia is common in liver cirrhosis but the mechanisms are not fully understood. Interestingly the results of a recent study suggest that cirrhotic thrombocytopenia, involving both increased platelet clearance in the periphery and impaired thrombopoiesis.[8] This is similar to what may happen in idiopathic thrombocytopenic purpura (ITP). In these cases, the growth factor-mediated stimulation of megakaryopoiesis might be expected to increase the platelet count. Indeed, initial clinical trials of the investigational thrombopoietic agent Eltrombopag, a small-molecule, non-peptide that acts as a thrombopoietin-receptor agonist inducing proliferation and differentiation of megakaryocytes, were found to show promising responses in adults with chronic ITP refractory to other treatments.[9] In liver cirrhosis, this agent was found to increase the platelet count in HCV-related cirrhosis and to facilitate antiviral treatment with fairly good results.[10] Unfortunately, it may be a costly option long term, as platelet counts generally return to baseline levels following treatment cessation, implying that continued treatment may be advised.

Finally, although the exact mechanisms through Danazol induce an increase in the platelet counts. Authors have speculated that it is similar to Eltrombopag. However, more studies are needed to evaluate the potential hepatotoxicity of this compound.

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