Project Title: Nutritional status and outcomes in patients with hepatic cirrhosis - Falls risk  

Code: CENT2

Host School/ Institute: Centenary Institute  
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Project Type: Design, Literature Review, Clinical

Project Category: Nutrition/Obesity, Chronic Diseases/Illness, Hepatology/ Gastroenterology

Project Keywords:
1. Hepatic cirrhosis  
2. Nutrition  
3. DXA  
4. Psoas muscle  
5. Outcomes: falls risk/falls/survival to liver transplantation

Project Description:

Background: Falls are a major determinant of patient outcomes with any chronic disease. Patients with cirrhosis have an increased falls risk and poor outcomes following falls. Malnutrition may be assessed in a variety of ways, which include: subjective global assessment (SGA), grip strength, anthropometric measurements of mid-arm circumference, triceps skinfold and calculated mid-arm muscle circumference, DXA scans with body composition and psoas muscle area. Aggressive nutrition interventions, which include oral sip supplements +/- branched chain amino acid formulations, may result in a temporary or permanent improvement in liver function. There is no data on the effect of nutritional interventions on falls risk in chronic liver disease.

Aim: To investigate the effect of nutritional status and nutritional intervention on falls risk and survival to liver transplantation from March 2011 to March 2013.

The student would be involved in updating a recently developed nutritional database and examining some of the parameters that may affect patients’ outcomes on the liver transplant waiting list. The areas of interest would include serum markers of liver function, markers of nutritional status including SGA, grip strength and anthropometry, nutritional supplementation, DXA with body composition, psoas muscle area, abdominal wall thickness, falls risk assessment (“six-pack”) and waiting time to transplantation. The investigator would examine the effects of nutritional markers of malnutrition on falls risk and survival to transplantation. Other potential areas of interest could include the effects of malnutrition on survival to transplantation and transplant outcomes such as length of stay, excessive weight gain post transplantation.

Background reading: