

膽道閉鎖兒肝移植前後營養狀況之評估

Growth and bone density before and after liver transplantation in children with biliary atresia

Weng HL; Yang SC; Lee PH; Lai HS; Ho MC; Chang MH

摘要

營養不良會增加慢性肝病患者移植前的罹病率、死亡率及移植後感染機率、住院天數甚至死亡率等問題，因此肝移植前營養狀況的評估是相當重要的。因此本研究之目的為探討國內膽道閉鎖病童肝移植前後的營養狀況，以作為日後營養照顧之參考。自臺大醫院收集 30 位膽道閉鎖患者，平均年齡介於 6 個月-9 歲間，移植前測量身長及體重，並做飲食評估及計算每日平均熱量及蛋白質的攝取量，並測量在移植前及移植後的骨密度。結果發現移植前身長小於 25th% 者有 23 位(佔 77%)，50th% 以上者僅有 1 位(佔 3%)。體重小於小於 25th% 者有 25 位(佔 83%) 沒有大於 50th% 者。蛋白質平均攝取量與國人每日蛋白質的建議攝取量比較之下，是沒有顯著差異($p=0.402$)，而熱量的平均攝取量顯著低於國人每日熱量建議攝取量($p<0.0001$)。骨礦物質密度(bone mineral density)在移植後一年較移植前有明顯增加($p<0.0001$)。由實驗結果發現，小兒膽道閉鎖患者移植前有嚴重的營養攝取不足，特別是熱量的攝取，同時也有骨質量減少及生長遲緩等問題，但骨質量減少的情形在移植後一年可獲得明顯改善。建議移植前對於食慾不振患者考慮早期給予管灌餵食，以增加營養素的攝取，另外在移植後長期性的營養照顧上仍需要作進一步的追蹤。

Abstract

Severe malnutrition before transplantation is associated with a higher rate of morbidity, mortality and a higher incidence of posttransplantation infections, surgical complication. Assessment the nutritional status of patients with chronic liver disease is important. Methods : Nutrition assessment such as anthropometric, dietary record and bone mineral density in 30 patients of biliary atresia with end-stage liver disease. Results: twenty-three patients (77%) were below the 25th percentile for body height. twenty-five patients (83%) were below the 25th percentile for body weight. Protein intake compare with DRI (Daily recommendation intake) were no difference ($p=0.402$). Energy intake compare with DRI were below and have significant ($p<0.0001$). In conclusion, Severe malnutrition (especially energy intake) decrease of bone mineral density and failure to thrive in biliary atresia before the transplantation. However, the status of bone mineral density could be improved obviously in the first year of transplantation. Tube feeding should be given as earlier as possible to the poor appetite patient before transplantation to increase nutrients intake. Also, long-term nutrition care for post-transplantation still need more follow-up.