Nutritional Management can benefit patients with severe liver disease

In Hong Kong, about 600,000 people are carriers of Hepatitis B virus, of whom 25% may develop chronic hepatitis, cirrhosis or liver cancer. Liver is the most important organ in the metabolism of various nutrients in the body. The impaired liver function in patients with chronic liver disease results in disturbance in nutrient metabolism, which is aggravated by decreased absorption of nutrients due to decreased appetite and malabsorption in patients with chronic liver disease. There is growing evidence showing a correlation between severe liver disease and the severity of malnutrition. Nutritional management therefore may benefit patients with liver cirrhosis or liver cancer.

The Department of Surgery of the University of Hong Kong recently carried out a nutritional management study in patients with liver cancer undergoing a nonsurgical treatment called "transarterial chemoembolization" by giving patients oral administration of branched chain amino acid (BCAAs), which are a special group of amino acids commonly deficient in liver disease patients. Encouraging results are recorded as follows:

- 1. improved nutritional/liver functional parameters
- 2. reduced prevalence and severity of ascites
- 3. reduced hospital re-admission rate due to decrease in morbidity
- 4. improved patients' quality of life

This study provides evidence that nutritional management with supplementation of BCAAs has a beneficial effect on patients by improving their nutritional and liver function status. Such treatment can also be important in optimizing patient's condition before the liver transplant and in promoting liver regeneration after liver resection.