

## **New Treatment for Liver Cancer – Radiofrequency Ablation**

Primary liver cancer is the No.2 cancer killer in Hong Kong. About 1500 new patients are identified every year, and 1,381 people died of liver cancer in 2002.

Currently, 4 methods are available for the treatment for liver cancer: surgical removal, liver transplantation, transarterial chemoembolization and radiofrequency ablation.

Radiofrequency ablation (RFA) as a treatment for liver cancer has just been developed in the recent 4 to 5 years. A needle is inserted into the tumor through the skin, by laparoscope or by operation, and emits radiofrequency wave that causes vibration of the ions in the cancerous cells, which in turn produces frictional heat. Upon reaching 50 degree Celsius, protein in the cancerous cells solidifies and the cancerous cells die.

RFA is suitable to treat patients with more than one liver tumor, with a maximum of four. It is also suitable for patients with tumors located in both the right and left lobes of the liver.

The Department of Surgery, Faculty of Medicine, HKU, is undergoing a study to examine the possibility of RFA to replace other treatment methods. Queen Mary Hospital of HKU introduced RFA in 2001 and has treated more than 300 patients using this approach. According to the preliminary data in other countries, the survival rate of patients treated with RFA is satisfactory.