## **Laparoscopic Surgery Brings Better Outcome for**

## **Secondary Hypertension Caused by Adrenal Tumor**

Adrenal tumors cause secondary hypertension and which accounts for 1 to 2% of all hypertension cases. This kind of hypertension is one of the few that can be cured permanently by surgical treatment.

The adrenal gland is a part of the endocrine system located above the kidney. Patients are relatively young, usually under 50. Adrenal tumor causing hypertension includes Conn's adenoma and pheochromocytoma.

Laparoscopic surgery for the removal of the adrenal gland was first reported in 1992, before this, open surgery has been the only way to remove the adrenal gland. However, the death rate of open adrenal ectomy is up to 2 % and patients need at least 4 to 6 weeks to recover. On the other hand, the death rate of laparoscopic surgery is approaching 0% and patients usually recover within 1 to 2 weeks.

Queen Mary Hospital, the University of Hong Kong, first introduced laparoscopic adrenalectomy in Hong Kong in 1995, and has been adopting the technique broadly. In the past 10 years, more than 100 patients have received this treatment. Up to 70% of patients have completely recovered from the secondary hypertension while the remaining patients can have a better blood pressure control with reduced medication.