## **Treatment without Medication: Biofeedback on Constipation**

14% of the population in HK suffer from constipation and many patients either do not respond to conventional medical treatments, or develop dependence on drugs. Long-term administration of stimulant laxatives can also lead to side effects such as melanosis coli. A study by the Department of Medicine, Faculty of Medicine, HKU and the Physiotherapy Department, Queen Mary Hospital since 2003 showed that "biofeedback therapy" was a simple and yet effective alternate treatment for constipation.

"Biofeedback therapy" consists of 4 simple modules: 1) education on proper diet, gut physiology and the mechanics of defaecation, 2) monitoring anal sphincter pressure and teaching the patients to relax the appropriate anal muscles for defaecation, 3) abdominal muscle training to enhance the propulsive force in defaecation, and 4) simulated evacuation - expulsion of a balloon to practice muscle coordination. Patients are also taught the correct toileting posture and are encouraged to practice the exercises at home. Compliance and regular practice are keys to success in therapy.

In the study, 40 patients with constipation received 4 to 5 biofeedback sessions at 1 to 2 week intervals. Good improvement in constipation symptoms including frequency of laxative use, abdominal pain severity, straining, frequency of spontaneous complete bowel movements and abdominal bloating was observed in the 40 patients while the results of the control group were far less satisfactory.