Indwelling Pleural Catheter (IPC) in malignant pleural effusions
Lit MPK, Lee KH, Chow PS, Law WL, Chan JWM
Department of Medicine, Queen Elizabeth Hospital

Keywords:
IPC
MPE

Introduction
Patients with malignant pleural effusions (MPE) can suffer from recurrent dyspnoeic episodes due to fluid re-accumulations. “Indwelling Pleural catheter” (IPC) is a recently introduced self-financed option. The catheter is subcutaneously implanted to the pleural cavity on a long-term basis, where pleural fluid can be intermittently drained at home or dayward and thus providing relief without repeated punctures and hospitalizations.

Objectives
To evaluate the initial results of the IPC in QEH

Methodology
A prospective analysis was conducted (September 2013 to September 2015). A nursing assessment on the eligibility of IPC would be made under four domains: 1. General condition: daily activities dependency, psychological status, motor functional status and visual acuity. 2. Social support: living environment and availability of carers; 3. Financial status; 4. The carer's ability to manage the IPC at home. Eligible patients and caregivers were subsequently educated on IPC, with re-evaluations at two to four-week intervals. Dyspnea scores, pain scores, body mass index, exercise tolerance, anxiety level and wound complications were measured before insertion and three months afterwards. Psychological counseling, dyspnea management technique and problem-solving skills would also be provided. Pulmonologist assessments would be provided at intervals. Hot-line or phone follow-up would be offered if necessary between scheduled visits, with appointments advanced if necessary.

Result
Six MPE patients (mean age 70.6) were put on IPC during the period, with 4 (60%) were males. Five (83%) were cared by family members. Five patients (83%) had been admitted twice and one (16%) admitted thrice due to dyspnea in the year before drainage, with an average length of stay of 76 days. None were re-admitted again via emergency room and only one had mild wound inflammation. There were no significant improvement in mean anxiety (9.3 vs. 7.5) and pain scores (3.3 vs. 4). However, the mean dyspnea score by Visual Analogue Scale (range 1-10) was obviously improved (7.3 vs. 3 p<0.001). There was a mean of 16 nurse clinic
consultations per patient after IPC insertions. Mean phone enquiries and follow-up calls by nurses about IPC care management was 2.8 per patient. All regarded IPC as useful with reduced dyspnea and improved well-being. Four patients died during the study period. Conclusion IPC improves dyspnea and well-being with minimal complications in MPE patients with limited life