Long term abdominal drain for the management of ascites in terminal malignancy patients: a safe and effective option
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Keywords:
Abdominal drain
Ascites
Terminal malignancy

Introduction
Ascites is often a manifestation of terminal malignancy. It can compromise patient’s quality of life. Traditional strategies for treating ascites include repeated paracentesis, peritoneovenous shunt, diuretic treatment and dietary restrictions. Long term abdominal drain has been implemented in our palliative care unit and it can avoid frequent hospitalizations and repeated tapping, and achieve better symptoms control.

Objectives
The aim of this review was to assess the safety, long term patency and complications of long term abdominal drain insertion in treatment of refractory ascites in terminal malignancy patients at our institute.

Methodology
This was a retrospective review of 19 patients who underwent 27 long term abdominal drain insertions from 1st January 2013 to 31st December 2014 at Department of Clinical Oncology, Queen Mary Hospital. All abdominal drains were inserted under ultrasound guidance by radiologists. Patients’ medical history, biochemical profiles, procedural records and clinical follow up until death were reviewed. Descriptive and comparative statistical analysis was performed using SPSS Version 20.

Result
This review comprised 10 males and 9 females with mean age 68.7 years (range: 46-89 years) diagnosed with metastatic disease from a variety of primary malignancies. Seventeen patients (89.5%) were confirmed to have peritoneal metastasis. Technical success rate of abdominal drain insertions was 100% and there was no procedural related death. The length of time drains remained in situ and patent, ranged 11-114 days (mean 47.2 days) and 12 drains (44.4%) remained in situ
for palliation till patient’s death. 11 drains (40.7%) had minor complications in which 1 (3.7%) immediate, 5 (18.5%) early and 5 (18.5%) late complications were reported. Three patients who suffered from peritonitis were treated uneventfully. A co-morbid diagnosis of hypertension or diabetes mellitus was found to have a significant trend towards higher complication rate (p=0.054). All patients can safely keep their abdominal drains at home and had interval admission at the day centre for intermittent drainage ranged 1 to 8 times. The length of hospitalization ranged 2-40 days (mean 12.7 days). In conclusion, the use of long term abdominal drain in terminal malignant patients is safe and effective. Regular follow up and care is strongly indicated following insertion of long term abdominal drain in all patients, especially those with a pre-procedure diagnosis of hypertension or diabetes mellitus.