Background

- Conventional management of malignant ascites is via recurrent large volume inpatient paracenteses.
- Northumbria serves a large geographical area and travel can be difficult for some patients. Chemotherapy often does not have any effect on volume and patients have high morbidity and mortality.
- Indwelling peritoneal catheters (IPC) are supported by NICE, have a low complication rate and have an estimated cost saving of £1051 per patient.
- The local pleural indwelling catheter service is well established as “a local service for local people” with excellent outcomes.
- A peritoneal indwelling catheter service was set up with the respiratory, surgical and the palliative care services.
- The palliative care service has been crucial to support patient selection and co-ordination into the community district nurse and palliative care services.

Practical points

- 2 systems for IPCs exist (Pleurex and Rocket).
- Rocket is used by Northumbria healthcare NHS FT.
- All patients are given pre-procedure antibiotics.
- Operators: surgical consultant, respiratory consultant, acute medicine staff grade doctor.
- Setting: Theatre or endoscopy room or clean procedure room in ambulatory care.
- Training in abdominal ultrasound undertaken to limit disruption for patients and avoiding the need to attend a radiology department.
- New procedure and guidelines set up locally.

Methods

- An initial retrospective review of all patients with peritoneal IPCs from 2015 till Jan 2018 was done.
- Local IPC guidelines were implemented in March 2018 and another review of IPCs inserted was conducted in October 2018.
- Development of patient/carer feedback questionnaire.
- On-going prospective review to consider if guidance should change regarding number of previous drainages prior to IPC insertion.
- Potential trial of paracenteses vs IPCs.
- Development of patient symptom score.
- Development of patient/carer feedback questionnaire.
- Potential trial of paracenteses vs IPCs.

Results

- Eleven IPCs were inserted between 2016 and May 2018, a further 8 were inserted following implementation of local guidelines in June 2018 to December 2018.
- Significant improvement in symptom control post IPC, with the greatest benefit perceived in pain control, abdominal distension and shortness of breath.
- 2 complications noted: a) migration of the drain within peritoneal tumour causing occlusion b) pain following procedure which required an overnight admission.
- Paracenteses prior to IPC has reduced from the initial audit group (3.4, range 1-6) when compared to the re-audit (0.63, range 0-2) group.
- Time to death post IPC insertion reduced in the re-audit group. Initial audit findings had one outlier with days to death 330, when excluding this patient the average number of days to death was 40 days. In comparison, the re-audit group had an average number of days to death of 12.

Discussion

- Reduction in number of days to death post insertion probably reflects the improved availability of the service which enables patients with significant morbidity to access the service.
- This may suggest that patients who may have otherwise experienced pain, distension and shortness of breath had their symptoms controlled as they died. Further service evaluation will help, but we know that we provide a safe, cost effective, accessible, supported and easily reproducible service.

Patient quotes

- Patients husband Jan 2018 “The drain made such a difference to my wife’s symptoms and quality of life, she got to her sisters wedding and her dress fitted as the swelling was controlled by the drain.”
- Patients wife Oct 2018 “My husband has had great relief, draining small amounts fluid in the comfort of our home. It has made a huge difference.”
- Patient Oct 2018 “It has been reassuring that the District Nurses visit twice a week to help to drain me.”
- Patient Oct 2018 “The drain has allowed me to be comfortable at home and plan visits to my family in Manchester. I know that I can drain myself if I become uncomfortable.”

Further work

- On-going prospective review to consider if guidance should change regarding number of previous drainages prior to IPC insertion.
- Development of patient/carer feedback questionnaire.
- Development of patient symptom score.
- Potential trial of paracenteses vs IPCs.

References

- NICE Guidance PleurX peritoneal catheter drainage for treatment-resistant, recurrent ascites MTG 9.