

Hospice Based Ultrasound and Paracentesis - The First Year

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Background:

Malignant ascites is a common condition in a range of neoplastic conditions and is frequently associated with significant morbidity. The onset and progression of malignant ascites is often coupled with deterioration in quality of life and can be a marker of poor prognosis.

Paracentesis of malignant ascites can provide symptomatic benefit in the short term with a well-tolerated, minimally invasive procedure. This is often undertaken in Hospital, which can mean prolonged and repeated admission for patients near end of life. There is anecdotal evidence that Hospices are increasingly reluctant to undertake paracentesis due to perceived risk.

Ultrasound scanning is increasingly becoming standard practice in hospital settings pre-paracentesis, as imaging can improve accuracy of patient selection, and improve safety. There has been increasing interest in Focused

Abdominal Ultrasound in Palliative Care (FASP) in order to provide imaging and paracentesis in a hospice setting.

With the help of a St James Place Grant, The Prince and Princess of Wales Hospice were able to purchase a Sonosite Micromax - a small, portable USS machine. Several medical and nursing staff then undertook formal FASP training allowing them to have the skills to undertake abdominal scans independently, and for the medical team to site drains safely when clinically appropriate.



Aims:

This audit aims to review the data collected over the first twelve months of FASP Scanning in the Prince and Princess of Wales Hospice, including patient and user feedback.

Methods:

All FASP scans performed between 1st October 2012 and 15th September 2013 were recorded on a standardised audit form, including information on diagnosis, USS findings, patient tolerability, drain insertion, paracentesis volumes and complications.

Results:

Between the 1st October 2012 and 15th September 2013, twenty-nine FASP scans were performed by 2 trained Specialist Palliative Care Consultants on **nineteen** individual patients with abdominal distension thought secondary to malignant ascites, suffering a range of symptoms and signs. Patients were seen both as outpatients and as inpatients.

Number of scans	29
Gender	19 Male, 10 Female
Malignancy by scan	4 Cholangiocarcinoma 5 Ovarian carcinoma 5 Hepatocellular cancer 6 Pancreatic cancer 1 Bladder cancer 2 Endometrial cancer 1 Prostate cancer 2 Breast cancer 1 Lung cancer 2 Colorectal cancer
Admitted from	17 Home 5 Hospital 7 OPD scans
Performance Status	7 x PS2 18 x PS3 4 x PS4
Findings	11 Gross ascites 8 Moderate ascites 10 other (distended bowel loops etc.)
Paracentesis performed	10
Volumes drained	4000 ml to 14,000 ml Mean 8,250 ml
Complications	One patient required 2 drains due to loculations - diagnosed by FASP
Length of stay	6 x 24 hours or less 1 x two days 1 x 13 days 1 x 14 days 1 x 19 days
Tolerated	All patients tolerated procedure well

There were an additional 5 scans performed to assess for bladder pre-catheterisation.

Patient comments

"Better than the hospital - I'm more confident, and it's not someone who doesn't know what they are doing"
"Great Stuff"
"No bother - feels brilliant"
"Delighted Hospice can offer this service - I didn't want to go to Hospital. Pleased to be able to access ongoing review"

Clinician Comments

"USS allowed repeat scan and visualised loculations and site for further successful drain"
"This drain would not have been clinically possible in Hospice without USS"
"Previous major surgery with peritoneal mets - USS allowed confidence"
"Useful prognostic and OOH/weekend info - no ascites but increasing disease"
"Clinically ascites, but scan showed minimal fluid - saved admission and failed drain"
"Able to scan patient as OP and bring in if needed - great to be flexible"
"GP called the day before, scanned today and assessed."

Conclusions:

The aim of this service development was to create a system where patients with malignant ascites could be assessed and managed either in their own home or the hospice, and avoid the need for hospital admissions/investigations. The new service has resulted in a reduction in hospital admissions and need for accessing hospital based USS services, with overwhelmingly positive patient/relative feedback and no significant complications to date.

When appropriate patients had been identified and began to access the service, they preferentially chose to come to PPWH rather than the acute setting. As a result Hospice services became more involved in a small group of patients who may otherwise have been less involved with Specialist Palliative Care Services.

The use of FASP has allowed us to be highly reactive to changing patient needs (scanning as OP the same/next day etc.), but has also advantaged inpatients who may otherwise have been transferred for scans - several patient comments were highly positive about "being updated" about causes for abdominal distension despite not undergoing paracentesis. Complex patients with ascites (obese, known loculations, peritoneal disease) could also be drained in the hospice safely due to use of FASP.

In practice we have found the service is best suited to outpatient and inpatient services, but the team have acquired the skills needed for home based scans should the need arise.

Overall, as a Hospice the use of FASP has been hugely beneficial and received very positively by patients. We would hope that over the coming months we are able to build on the first year success, and increase the numbers of patients and families who can benefit from it.

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