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Palliative Management of Malignant Ascites Guidance

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Target audience:

This Trust-wide policy is directed to medical and nursing staff working with adult patients in the acute hospital setting.

Sources of advice in relation to this document:

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Previous Guidance for the Palliative Management of Malignant Ascites (2007)

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NHSCT Mission Statement

To provide for all, the quality of service we expect for our families, and ourselves.

Palliative Management of Malignant Ascites Guidance

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Palliative Management of Malignant Ascites Guidance

Introduction

Ascites is the accumulation of protein rich fluid in the peritoneal cavity and can be classed as an exudate or transudate depending on the serum ascites albumin gradient. It can occur in conditions such as cirrhosis of the liver, heart failure, tuberculosis but over 90% is secondary to malignancy. The commonest cancers to cause ascites are ovarian, breast and gastrointestinal. Peritoneal involvement by the cancer causes an exudate to form with a high albumin content and low gradient (<11g/L), while less commonly a transudate can form secondary to cirrhosis or large liver metastases, with a low albumin content and high gradient (>11g/L).

Purpose of the Guidance

Malignant ascites can give rise to distressing symptoms such as nausea, vomiting, abdominal distension, pain and breathlessness and carries a poor prognosis. Treatment should therefore be minimally invasive with minimisation of the risk of complications and aimed at the relief of symptoms. This guidance has been developed to support current best practice in the palliation of malignant ascites at the end of life.

Target Audience

This Trust-wide policy is directed to medical and nursing staff working with adult patients in the acute hospital setting.

Responsibilities

Directors

Responsibility is delegated to individual Directors who have responsibility to ensure that this guidance has been disseminated to the clinical staff working within their area of responsibility.

Clinical staff working in hospital and community environment

It is the responsibility of clinical staff working with adult patients in the acute hospital setting to be aware of the guidance and to implement it when appropriate.

Equality, Human Rights and DDA

The guidance is purely clinical in nature and will have no bearing in terms of its likely impact on equality of opportunity or good relations for people within the equality and good relations categories.

Alternative formats

This document can be made available on request on disc, larger font, Braille, audio-cassette and in other minority languages to meet the needs of those who are not fluent in English.

Sources of advice in relation to this document

The guidance author, responsible Assistant Director or Director as detailed on policy title page should be contacted with regard to any queries on the content of this policy.

Policy Statement

The management plan should be in line with current best practice but also be minimally invasive, aim to relieve distressing symptoms and reduce the risk of additional burden. The palliative management of malignant ascites in the NHSCT should also be individualised, after an holistic assessment of the patient which should include their disease stage, current symptom burden, prognosis and informed goals of treatment.

Management Plan

- Assess patient suitability for intervention and record findings in the patient's records.

- If patient is too frail for either diuretics or invasive procedures, symptom management with analgesia and antiemetics should be maximised, with the Hospital Specialist Palliative Care Team's involvement.

- Consider diuretics if abdomen not tense and symptoms mild or post paracentesis to reduce re-accumulation of ascitic fluid. There is some evidence that diuretics work best where there is evidence of portal hypertension (1).
 - check U&E & BP (baseline)
 - if no contra-indications commence Spironolactone 100-200mg mane
dose increase – 100mg every 3-7 days
usual maintenance dose 300mg/day
 - If no response after 2 weeks, but renal function satisfactory and patient still suitable, consider addition of Furosemide 40mg mane (response may take ¹⁰⁻²⁸/₇ to be evident).

- monitor BP (hypotension), U&E (hyperkalemia, ↓ renal function), patient's general condition, response (symptoms, abdominal girth, weight loss) and discontinue medication if no evidence of benefit after 1 month or if significant side effects develop.
- Consider paracentesis if abdomen tense or symptoms moderate to severe.

Paracentesis

- Should only be undertaken by doctor competent in this procedure, or under trainer supervision if part of practical skills training.
- Give appropriate explanation and obtain written consent.
- Ultrasound evaluation +/- marking of drainage site may be required if concern over diagnosis, suspicion of bowel obstruction or loculation of fluid.
- IV fluids are not routinely required but patients with portal hypertension secondary to massive liver metastases or hepatocellular carcinoma +/- cirrhosis may be at risk of hypovolaemia.
- IV albumin has no proven role in paracentesis for malignant related ascites (2) but if evidence of concomitant portal hypertension +/- cirrhosis, especially in the setting of large volume paracentesis (more than 5 litres/24 hours), an IV albumin infusion should be considered (6-8g/L of ascitic fluid drained).
- Drain should be in for the shortest time possible to reduce complications especially infection and burden to the patient.

Procedure

- Record baseline pulse, BP and check U&E. Platelet count (plt > 40) and coagulation screen (INR < 1.4) should be checked in at risk patients (previous chemotherapy / advanced liver disease) and corrective steps taken if appropriate. Stop routine anticoagulation 48 hours before the procedure.
- If hypotensive, dehydrated or severe renal impairment, consider IV hydration with 0.9% sodium chloride (150mls per litre of ascitic fluid removed) and drain more slowly, ($\leq 1\text{L/hr}$ and $\leq 3\text{L}$ overall).
- Procedure should be performed by a doctor and nurse together to ensure aseptic technique.
- Have patient empty bladder and lie on bed at 45-90°.
- Choose drain site → avoid scars, tumour masses, distended bowel or bladder, liver, inferior epigastric artery. Preferred sites → lower quadrants lateral to the rectus muscle.
- Put on sterile gloves.
- Sterilize site with iodine.
- Place sterile draping towels.

- Anaesthetise chosen site by injecting 1 or 2% Lidocaine, including onto peritoneum (max. 10mls).
- A small nick is performed using a scalpel.
- Introduce the catheter assembly of a Bonanno suprapubic catheter through the abdominal wall by using short thrusts at first obliquely up to the peritoneum and then perpendicularly to penetrate the peritoneum, when resistance disappears. If position correct fluid should flow freely when vent plug removed. If peritoneal fluid is very proteinaceous manual aspiration with a 3 way valve and syringe may be necessary.
- Disengage the needle from the catheter hub. Holding the needle to use it as a guide, advance catheter until the suture disc is flat against the skin.
- Connect the adapter clamp as directed and secure it with tape to the abdominal wall.
- Alternatively the trochar in peritoneal aspiration pack could be used if clinician more familiar with it, time limited or no Bonanno catheter available.
- Connect the drainage bag to the catheter, emptying it as necessary.
- Observations are recorded ½ hourly until 2 hours post-procedure.
- If patient dizzy during drainage clamp drain and record pulse and BP, if hypotensive slow drainage as above or stop if appropriate.
- Drain until rate slows or stops (usually ≤ 5L and ≤ 6 hrs, maximum 24 hrs).
- Remove drain.
- If minimal leakage from puncture site apply dressing pad.
- If significant leakage persists make a purse string suture to control.
- Monitor for complications especially pain, hypotension, haemorrhage and infection and treat accordingly.
- Aim to drain as quickly as possible so drain normally out within 24 hours.
- The patient can be discharged a few hours after the drain is removed if observations stable.

Other treatments

- Insertion of a permanent indwelling paracentesis catheter (pleurx drain) into the abdomen can be considered in palliative care patients who are experiencing distressing symptoms from the rapid reaccumulation of the fluid despite paracentesis on a weekly or fortnightly basis.
- If required this procedure can be carried out in the radiology department at Belfast City Hospital at the request of the patient's oncologist. These catheters are tunnelled to reduce the risk of infection.
- Early studies suggest that this technique can provide a safe and effective option for those patients with refractory malignant ascites who have a prognosis of more than 3 months but for whom oncology treatment is no longer an option (6,7).
- For ongoing management of the catheter refer to NHSCT guidance on skin-tunnelled indwelling (pleurx) catheters, 2010 (NHSCT/10/356).

Checklist for Abdominal Paracentesis Consent

Discuss the purpose of the procedure and the related complications listed below. Allow opportunity for questions to be asked and appropriately answered, before completion of the standard Trust consent form.

Common complications

- A feeling of weakness and tiredness for 1 to 2 days.
- Some leakage of the fluid from the drain site, once drain removed.
- Nausea and/or vomiting.

Possible complications

- Low blood pressure.
- Kidney failure.
- Infection.
- Bleeding.
- Puncture of an organ in the abdomen.

References

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