

Abdominal paracentesis: use of a standardised pro forma improves patient safety with good record keeping

Authors: Md Deloar Hoshen^A and Usama Mahmood^A

Introduction

Paracentesis, the aspiration of fluid from the abdominal cavity, is a diagnostic and therapeutic procedure frequently performed in gastroenterology wards. Paracentesis is generally a safe procedure but there are variations in practice and some potential complications such as bleeding and injury to internal organs. These potentially serious risks can be reduced by using safety checks and optimal technique. Following several near-miss incidents involving ascitic drains in our Trust, we undertook an audit cycle in order to improve patient safety.

Materials and methods

A total of 15 documentation components were identified as essential for safe ascitic drain insertion, management, and removal based on the current British Society of Gastroenterology guidelines¹ and expert opinion. We audited a representative sample of 17 sets of patient medical notes who had undergone paracentesis on Ward 91 and 92 (gastroenterology wards) over a period of 6 weeks. Based on these results we designed a poster for junior doctors and a novel paracentesis pro forma in order to standardise the safety check and documentation process and facilitate best practice (Fig 1). Printed copies were made available on the wards with an electronic copy available on a shared drive. To assess its long-term effect and direct further work, two cycles of re-audit were completed over a period of 12 weeks after each intervention.

Results and discussion

The initial audit demonstrated that 100% of paracentesis entries included a record of verbal consent. However, there was a large variation in the quality of documentation, with an average of 47% (n=8) compliance with the essential documentation components. In particular, explanation of procedure-related complications, amount of local anaesthetic used, time of drain removal, total volume drained, and post-procedure care instructions were poorly recorded. In

Abdominal paracentesis Proforma

Patients name: _____ **Name of the Doctor:** _____

DOB: _____ **Grade:** _____

NHS: _____ **Signature:** _____

Please affix patients id sticker if available

INDICATION: Therapeutic Benefit ☐ Malignant Ascites ☐

Date: _____ **Time:** _____

1. Pre-Drain checks:

- Written consent taken: ☐
- Check and document Pre-procedure INR: (Discuss with Gastro SpR if INR > 1.5) ☐
- Check Pre-procedure Platelet count: (Discuss with Gastro SpR if the count is <50) ☐
- Assess the need for USS guidance: (before first ascitic drain and in the instance of dry tap) ☐
- HAS ordered: (Please order 5 to 6 units of 100mls 20% HAS) ☐

2. Drain Insertion:

Site: _____

Name of Local anaesthetic used and amount: _____

Number of attempts: _____

Any Complications: _____

Fluid colour: _____

3. Post drain insertion Management:

- ☒ HAS prescribed on e-Meds: ☐
(Please prescribe on prn side: 100 mls 20% HAS for every 2.5 L fluid drained)
- ☒ Fluid Sample sent for Cell Count: ☐
(In universal white top bottle) & Culture (in blood culture bottles-both red top and blue top)
- ☒ Nursing Staff instructed to remove the drain after 6 hours. ☐
- ☒ Total volume of ascites drained: ☐
- ☒ Volume of HAS required: ☐

Fig 1. Paracentesis pro forma to standardise the safety check and documentation process.

order to encourage better compliance with the essential documentation components, we designed a poster for the doctors' office. Insignificant improvement was detected as a result of this intervention. However, the introduction of the paracentesis pro forma resulted in an immediate and sustained increase in documentation compliance to 83% (n=14). The greatest improvement was seen in recording pre-procedure safety checks and post-procedure care instructions (100%; n=17).

Authors: ^ALeeds Teaching Hospitals NHS Trust, Leeds, UK

Conclusion

Introduction of a simple, standardised pro forma improves documentation in abdominal paracentesis, promoting best practice and safeguarding patient safety. It also boosts the confidence of junior doctors in performing the procedure. ■

Conflicts of interest

None declared.

References

- 1 Moore KP, Aithal GP. Guidelines on the management of ascites in cirrhosis. *Gut* 2006;55:1–12.
2. General Medical Council. *Protecting children and young people: The responsibilities of all doctors. Keeping records*. GMC, 2018. www.gmc-uk.org/ethical-guidance/ethical-guidance-for-doctors/protecting-children-and-young-people/keeping-records