Letter: long-term abdominal drains in refractory ascites-evolving concept of palliative care in decompensated cirrhosis. Authors' reply

Macken, Lucia; Bremner, Stephen; Sheridan, David; Verma, Sumita

Published in:
Alimentary Pharmacology & Therapeutics

DOI:
10.1111/apt.15983

Publication date:
2020

Letter: long-term abdominal drains in refractory ascites - evolving concept of palliative care in decompensated cirrhosis. Authors' reply

Lucia Macken, Stephen Bremner, David Sheridan and Sumita Verma on behalf of the REDUCe study team.

We thank Dr Roy and colleagues for their interest and comments (1).

We had inadvertently classified one patient as having Child A disease when in fact their Child Pugh Score was 7 (2). We appreciate this being brought to our attention.

Global tests of clot formation, such as rotational thromboelastometry and thromboelastography may eventually have a role in the routine assessment of clotting in patients with cirrhosis, thus optimising use of blood products (3). They however remain without well-defined parameters in these patients, thus requiring subjective interpretation of complex data (3). Additionally, such expertise may not always be available in non-teaching hospitals.

Our study cannot be compared with Chan et al's (4) (still waiting for the full manuscript) as they included only 30% of patients with liver disease and more importantly, used non-tunnelled drains which are associated with higher infection risk compared with tunnelled drains (4.4% vs. 21%) (5). All patients in the REDUCe study received prophylactic antibiotics for the study duration. Incidence of self-limiting cellulitis/leakage, as already reported was 41% (7/17) in the long-term abdominal drain (LTAD) vs. 11% (2/19) in the large volume paracentesis (LVP) group. Our peritonitis incidence observed after primary prophylaxis (LTAD vs. LVP group, 6% (1/17) vs. 11% (2/19)) is comparable with other studies in cirrhosis (6).

It must be emphasised that the REDUCe study was not powered to detect differences between groups. Nonetheless, as already reported, serum creatinine remained stable in both groups:

baseline and week 12 serum creatinine (μmol/L) (median, IQR), LTAD vs. LVP group being 109 (79, 141) vs. 113.5(89, 134) and 104.5 (81, 115.5) vs. 127 (63, 158) respectively (2). Recent trials addressing long-term administration of human albumin solution (HAS) in patients with cirrhosis and ascites have given conflicting results (7-8). Reasons include baseline severity of liver disease, duration of follow-up and amount of HAS administered (9). In palliative patients with refractory ascites due to cirrhosis, focus should be symptom control and avoiding hospitalistaion. The ANSWER study (7) excluded patients with refractory ascites but in the MACHT trial (8) use of HAS and midodrine was not associated with significant improvements in control of ascites/need for LVP nor health-related quality of life. Therefore at present HAS cannot be routinely recommended in palliative patients with refractory ascites due to cirrhosis.

Designing palliative intervention trials raise complex issues (10) and usual outcomes such as mortality may not be appropriate. Since infection remains the main deterrent to the use of palliative long-term abdominal drains in cirrhosis, in our opinion, any future definitive study should be designed as a non-inferiority trial for peritonitis incidence.

References

1. Roy A, Taneja S, Duseja AK. Letter: long term abdominal drains in refractory ascites - evolving concept of palliative care in decompensated cirrhosis. Aliment Pharmacol Ther. 2020;00:00

2. Macken L, Bremner S, Gage H, et al. Randomised clinical trial: palliative long-term abdominal drains versus large volume paracentesis in refractory ascites due to cirrhosis. Aliment Pharmacol Ther. 2020;00:1–16.

3. O'Leary JG, Greenberg CS, Patton HM, Caldwell SH. AGA Clinical Practice Update: Coagulation in Cirrhosis. Gastroenterol. 2019;157:34-43

4. Chan PC, Cheung KWA, Chan CH, et al. Patterns and infection outcomes of bacterial colonization in patients with indwelling abdominal drains for malignant ascites. Ann Palliat Med 2019, Nov 18th

5.Fleming ND, Alvarez-Secord A, Von Gruenigen V, et al. Indwelling catheters for the management of refractory malignant ascites: A systematic literature overview and retrospective chart review. J Pain Symptom Manage. 2009;38:341-349

6.Facciorusso A, Papagiouvanni I, Cela M, et al. Comparative efficacy of long-term antibiotic treatments in the primary prophylaxis of spontaneous bacterial peritonitis. Liver Int. 2019; 39:1448-1458

7. Caraceni P, Riggio O , Angeli P , et al. Long-term Albumin Administration in Decompensated Cirrhosis (ANSWER): An Open-Label Randomised Trial. Lancet. 2018; 391:2417-2429.

8. Sola E, Sole C, Simon-Talero M, et al. Midodrine and albumin for prevention of complications in patients with cirrhosis awaiting liver transplantation. A randomized placebo-controlled trial. J Hepatol, 2018.69:1250-1259.

9.Zaccherini G, Bernardi M. The Role and Indications of Albumin in Advanced Liver Disease. Acta Gastroenterol Belg. 2019;82:301-308.

10. Higginson IJ, Evans CJ, Grande G, et al; MORECare. Evaluating complex interventions in end of life care: the MORECare statement on good practice generated by a synthesis of transparent expert consultations and systematic reviews. BMC Med. 2013;11:1-11