

Infection in indwelling peritoneal catheters for malignant ascites

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Dear Editors, we read with interest the editorial (1) and original article (2) published on your website. It was an interesting study and debate on the rate of infections in patients with malignant ascites and indwelling pig tail catheters. We were alarmed to hear of the rate of infection: 21% of the entire population and 48% of patients with a positive ascitic fluid bacterial culture-such high rates of infection would not make such a palliative procedure tenable and most of our patients would refuse to have this done, irrespective of the suggested benefits to quality of their remaining life. We furthermore reject the discussion that the higher rate of infection is due to the drainage being done in hospital and associated with patients with concurrent liver cirrhosis and hepatocellular carcinoma (1,2). It would be interesting to understand fully the governance process as well as steps involved in the insertion of the pig tail catheters. Are they performed under strict asepsis, in a dedicated procedure room and are antibiotics given before or after? We have a well-established pleural service (3) for indwelling pleural catheter insertion for malignant pleural effusions and have very low complication rates, probably due to prophylactic antibiotic use, insertion of the catheters in surgical theatre as well as having 3 highly trained consultants performing or supervising the procedures (4). We have adapted our technique and governance to insert peritoneal catheters for malignant ascites. We have clear selection criteria and insert Rocket catheters in theatre or in a dedicated clean room under strict asepsis. There are 3 physicians and 1 surgeon trained to perform them and we also give a single shot of antibiotics before the procedures (co-amoxiclav if less than 65 years of age, piperacillin-tazobactam if more than 65 years of age, and a combination of metronidazole and gentamicin if penicillin allergic) (5). We have inserted 35 peritoneal catheters since November 2017 and have had 1 site infection

with no associated mortality. We attribute our low infection rates to the above vigorous processes. The long-term palliative abdominal drains vs large-volume paracentesis in cirrhosisrelated refractory ascites: multi-centre feasibility randomised controlled trial (REDUCe) supported the safety and efficacy of palliative LTAD in RA due to advanced cirrhosis with only 1 possible peritonitis in the peritoneal catheter arm which had 17 patients (6). Prophylactic antibiotics were given in that study as well. As such, the study by Chan *et al.* (2) is important as the data on bacterial colonisation increases our understanding of the pathophysiology at play. However, further details are required and should be provided. Perhaps a repeat of the study with prophylactic antibiotics before the insertion of the pig tail drain could be performed, with hopefully a reduction in the authors' complication rates.

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Footnote

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References

- Stukan M. Malignant ascites drainage with indwelling abdominal catheters: can we predict and prevent infection complication? Ann Palliat Med 2020. [Epub ahead of print].
- 2. Chan PC, Cheung KWA, Chan CH, et al. Patterns and infection outcomes of bacterial colonization in patients

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with indwelling abdominal drains for malignant ascites. Ann Palliat Med 2019. [Epub ahead of print].

- 3. Aujayeb A, Parker S, Bourke S, et al. A review of a pleural service. J R Coll Physicians Edinb 2016;46:26-31.
- 4. Aujayeb, A, Hopkins D, Taylor L, et al. A review of an indwelling pleural catheter service. Lung Cancer 2020;139:S81.
- Armstrong L, Dewhurst F, Frew K, et al. Indwelling peritoneal catheter insertion for malignant ascites: service evaluation and guideline production. BMJ Support Palliat Care 2019;9:A46.
- Macken L, Mason L, Gage H, et al. Long-term palliative abdominal drains vs large-volume paracentesis in cirrhosisrelated refractory ascites: multi-centre feasibility RCT (REDUCe). Gut 2019;68:A122.