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Inguinal Hernia Repair under Local Anaesthesia in Patients with Cirrhosis

Gerwin Alexander Bernhardt

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To the Editor,

The prevalence of chronic liver disease and liver cirrhosis has continued to rise in recent years, especially with the epidemic of obesity, alcohol abuse, and viral hepatitis [1]. In end-stage liver disease, portal hypertension leads to refractory ascites, accounting for elevated intraabdominal pressure with peritoneal distension resulting in a higher prevalence of abdominal wall hernias.

In the June 2011 issue of the *World Journal of Surgery*, Oh et al. [2] described their results of open nonmesh inguinal hernia repair in patients with cirrhosis compared to the results of noncirrhotic patients. Although this study includes the largest number of cirrhotic patients to date and so is of great value, it nonetheless raises some questions.

First, it is not clear what follow-up examinations were included and whether imaging techniques such as sonography or magnetic resonance imaging were used in addition to the clinical examination. Second, the use of antibiotics is questionable as they are only recommended in high-risk patients undergoing mesh repair [3]. It remains unclear why they used antibiotics in nonmesh repairs. Third, mesh repair is recommended for all patients because of the lower recurrence rates [3]. The relatively small recurrence rate in the series by Oh et al. [2] of 2.3% might be due to the expertise of a single surgeon, so these results cannot be generalized. Fourth, in the methods section, the authors stated that the anesthesia type was determined by the anesthesiologists after individual patient evaluation. As patients with cirrhosis are at high operative risk for increased postoperative morbidity and mortality, it would be interesting to know how many cirrhotic patients were not eligible for routine hernia repair or were American Society of Anesthesiologist (ASA) class IV and V patients and therefore had to be excluded. General anesthesia (GA), on the one hand, could be life-threatening for high-risk patients. On the other hand, spinal anesthesia (SA) might be impossible because of the higher risk of spinal bleeding. It would be interesting to know if these authors have experience in the conservative treatment of hernias with a watch-and-wait follow-up and if they have data on the quality of life of those patients compared to that of the operatively treated patients. An alternative option to conservative treatment would be to use local anesthesia (LA) for patients initially ineligible for GA or SA. High-risk patients especially are eligible for inguinal hernia repair with LA [4]. Data in the literature for cirrhotic patients undergoing hernia repair in LA are limited [5]. It would be interesting to know whether Oh and his group have any experience with inguinal hernia repair with LA.

We recently operated on a patient who had severe groin pain and Child-Pugh class C liver cirrhosis with refractory ascites. The patient had been rejected several times by surgeons and anesthesiologists because of his poor general status. We performed an open mesh repair as described earlier [4]. The postoperative course was uneventful, and he was discharged 1 day after surgery. At the latest follow-up, 6 months after surgery, he was free of pain, and no recurrence could be detected.

Oh et al. [2] showed that inguinal hernia repair in patients with cirrhosis can be done safely even in a non-mesh manner. I suppose that if more operations were

G. A. Bernhardt (✉)
Division of General Surgery, Department of Surgery, Medical University of Graz, Auenbruggerplatz 29, 8036 Graz, Austria
e-mail: gerwin.bernhardt@lkh-voitsberg.at

G. A. Bernhardt
Department of Surgery, District Hospital of Voitsberg, Voitsberg, Austria

performed using LA there would be a higher number of ASA class IV and V patients who would benefit from surgery in such an increasing population of cirrhotic patients. Reports on this topic are needed, including quality of life data for these patients [6].

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Conflicts of interest The author declares that there are no conflicts of interest.

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