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Re: Fredrick Leidberg, Petter Kollberg, Marie Allerbo, et al. Preventing Parastomal Hernia After Ileal Conduit by the Use of a Prophylactic Mesh: A Randomised Study. Eur Urol 2020;78:757-63

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Letter to the Editor

Re: Fredrick Leidberg, Petter Kollberg, Marie Allerbo, et al. Preventing Parastomal Hernia After Ileal Conduit by the Use of a Prophylactic Mesh: A Randomised Study. Eur Urol 2020;78:757–63

We congratulate Leidberg and colleagues [1] on conducting a well-designed randomized controlled trial to answer an important clinical question: does prophylactic mesh placement at the time of radical cystectomy with urinary diversion decrease the risk of parastomal hernia (PSH)? At the cost of adding an extra hour to the operating time, mesh placement decreased clinical PSH rates over a median 2-yr follow-up period (11%) compared to no mesh (23%). No difference was noted, however, in terms of radiological PSH (19% vs 25%) and the aforementioned findings were confirmed on multivariable analyses. We would like to shed light on some pertinent points that have direct implications for these findings in clinical practice.

1 It would be helpful to more clearly define what constitutes "clinical hernia": the authors counted both symptomatic and asymptomatic hernia as clinical PSH. Given that this assessment was not blinded and rather subjective, there could be an element of ascertainment bias, as patients with mesh in place could be presumed to be less likely to have a clinical hernia. Indeed, for the mesh group, the rate of radiological PSH was higher than the rate of clinical PSH (19% vs 11%), and was not statistically significantly different from the no-mesh group. It would also be interesting to see how many had clinically symptomatic or significant PSH. For patients in either arm deemed to have clinical PSH, the rate of surgical intervention (if assumed as a proxy for clinically significant PSH) was 25% (5/20) in no-mesh arm and 20% (2/10) in the mesh arm. This suggests that most of the clinical hernias may not have been clinically significant, a finding that has also been noted by other high-volume centers [2,3].
2 How did the authors differentiate parastomal bulge from clinical PSH? It seems somewhat counterintuitive that the rates of bulging were higher in the mesh group (24%) than in the no-mesh group (15%).
3 While the majority of radical cystectomies continue to be performed either as an entirely open approach or with an extracorporeal conduit, the lack of minimally invasive approach in the study limits the generalizability to patients undergoing robotic/laparoscopic approaches. Ongoing clinical trials, some of which will include robotic cystectomy patients or study modified approaches for mesh placement, may provide more details, especially since prophylactic mesh placement has not shown a significant benefit in recent trials for patients receiving a colostomy [4,5], including those undergoing laparoscopic surgery [6].
4 Was the surgical approach otherwise standardized across all participating institutions? Patients undergoing surgery at one of the hospitals had more than three times the risk of clinical hernia than others, and interestingly this association was seen with radiological PSH and parastomal bulging as well. Given that 60% of patients did not undergo surgery at Skåne Hospital (the reference standard, with presumably lowest rates of PSH), these findings warrant closer assessment of differences in preoperative patient selection, intraoperative differences, or postoperative care at the centers that might play a bigger role than mesh placement itself [2,3].
5 Less than half of all patients included underwent preoperative chemotherapy, and a very small fraction underwent previous laparotomy incisions/intra-abdominal surgeries. Both of these groups might arguably have higher rates of PSH, and while current multivariable analyses did not show an association between chemotherapy and hernia, the study might be underpowered to detect these associations.
6 Lastly, do the authors have any details about the 190 patients who were excluded from this study? Did they undergo mesh placement as well, and, if so, what were their outcomes?

Conflicts of interest: The authors have nothing to disclose.

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