Reviewer’s report

Title: Use of a porcine dermal collagen (PermacolTM) implant for contaminated abdominal wall reconstruction in a 105-year-old patient: A case Report and literature review.

Version: 4 Date: 22 November 2014

Reviewer: Guido Woeste

Which of the following following best describes what type of case report this is?: Other

If other, please specify:

Unusual indication for using a biologic mesh

Has the case been reported coherently?: No

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: No

Is the case report persuasive?: No

Does the case report have explanatory value?: No

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: No

Is the anonymity of the patient protected?: Yes

Comments to authors:

Dear authors,
you discussed the indications for biologic meshes quite well.
Regarding the recent lieterature there is no good indication for closing a burst abdomen using a biologic mesh. The STAR study has been terminated without beeing able to get cleareresults. The indication for biologic meshes are well defined by the ventral hernia working group (VHWG) and the ventral hernia risk score,
None of these describe age being a risk for infection with the recommendation for biologic meshes. You should add some risk factors apart from only age: BMI, ASA, diabetes and certainly the wound classification according to the CDC definitions. Has there been any infection during relaparotomy? In your conclusions you mention "contaminated abdominal wall" but before you do not describe contamination.

The technical aspect is keen for the success of abdominal wall closure. You chose to put the Permacol(TM) in an onlay position. Certainly this is the worst choice.

"The abdominal skin was closed with single prolene sutures" but later you say "seven days after the second surgery the abdominal skin was closed" that does not make sense.

Please make a comment on this technical aspect and why you used permanent sutures with a biologic mesh. Furthermore the Permaco(TM) you used was pretty small. How big was the incision?

What tool did you use for follow-up? Was it just a questionnaire, a phone call or a clinical evaluation with ultrasound. Talking about the incidence of hernias a precise follow-up is mandatory.

Making this case more interesting and unique you should add a picture of the operative site.

In the discussion you mix reports about cross-linked and non-cross-linked biologic. There is a lot of debate about that point.

In the latest papers the use of synthetic mesh is supported even for clean-contaminated cases with good results. You did not emphasis on that point.

For promoting a two-stage repair you quote papers that are 20 and 11 years old. This is no longer part of the debate.

In summary you are absolutely right that you can use a PErmaco(TM) in this case, but there is no need for a biologic mesh just because of the old age of the lady. Unfortunately this case report does not present any new concepts of closing a burst abdomen.

Level of interest: An article of limited interest

Quality of written English: Acceptable

Declaration of competing interests:

I have no conflict of interest