Peer Review File

Article information: https://dx.doi.org/10.21037cdt-22-176

Comment 1: The authors mainly discuss the differences between gelatin coated and non-gelatin coated grafts. It would be worthwhile to discuss other aspects such as graft material, weaving technique, etc.

Reply 1: The original title of this review, given by the journals publisher was: Are gelatin sealed prostheses better than unsealed prostheses for FET? Therefore, we put our focus on the gelatin sealing. Little information is published about the exact constitution of the prostheses but most of it seem to be woven Dacron. More specific information like Dacron composition or waving technique could not be found. We also asked the manufacturers by email for more information. Only Japan Lifeline send us some information, from the other manufacturers we did not get any reply. We think it could be a company secret.

Changes in the text: We inserted the available information (page 7, para 2, lines 4, 5).

Comment 2: Cook also makes an hybrid graft which could be discussed.

Reply 2: Only one study about the Cook Prosthesis could be found which did not describe closer details about the material. By email, cook told us that they don't have a special hybrid prosthesis for aortic arch replacement.

Comment 3: Data regarding blood permeability should be discussed in greater details.

Reply 3: Early leake from unsealed prosthesis is discussed. Only very little data about late onset graft leakage could be found and is discussed. A report about late onset leakage from sealed prostheses and another report about leakage after reintervention was analyzed. No report about early graft oozing in sealed grafts was available and no clear data about bleeding complications in larger numbers.

Changes in the text: (page 6, para 2, lines 6-11).

Comment 4: Is there any data regarding other types of antibiotics than Rifampicin?

Reply 4: Also, other antibiotics were used to make vascular prostheses more resistant to infections, mainly such agents with a good efficacy against gram positive cocci, the most common germs responsible for graft infections. No examination of the binding capacity to sealed/ unsealed prostheses could be found for those antibiotics except rifampicin.

Changes in the text: We mentioned those different antibiotics (page 8, para 1, lines 3-9).

Comment 5: It is mentioned that the pores in the gelatin-coated graft are wider than in the uncoated graft. Was this characteristic associated with higher rates of bleeding complications once the gelatin has degraded?

Reply 5: Gelatin degradation is described during the first few weeks. Only one study, describing two cases of late onset bleeding with gelatin sealed prosthesis could be found.

Changes in the text: We mentioned the possible conclusion that this could be due to the wider pores, but for a clear suspicion, the described cases are not enough (page 6, para 3, lines 16-17).

Comment 6: It is mentioned that the gelatin used in the Terumo graft is sourced in Australia. Is this the case for all the other manufacturers as well?

Reply 6: No information about the origin of the used gelatin is published. We wrote an email to all manufacturers concerning their graft material and the origin of the gelatin. Only Japan Lifeline answered, the information is added.

Changes in the text: We added the information from the manufacturers (page 9, para 1, lines 4-8).

Comment 7: In the second section of the article, the authors should discuss in greater details ongoing research in graft development.

Reply 7: Publications about graft development are focusing on technical aspects such as faster implantation procedure through a proximalisation of the suturing zone or an open stented part covering the supraoptic vessels origin. About graft material, little is published.

Changes in the text: We added the newest approaches of technical developments in our paper (page 11, para 2, lines 6-10).