

Effect of Nylon Vs. Polyglactin (Vicryl) in Appendectomy Skin Sutures

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Dear Editor,

With interest, I have read the article, “comparison of infection incidence between appendectomy skin incisions sutured by nylon and polyglactin (Vicryl)”, by Golchini et al. (1). The authors have addressed an important topic regarding the use of Vicryl in appendectomy surgeries. Because it is used in many clinical studies, the safety should be considered (2, 3). It is very interesting to see that the effectiveness of this material is the same as nylon.

However, I have several comments and concerns about the article. First, in the method section of the abstract it was mentioned, “a total of 130 patients who underwent appendectomy were divided into two groups of 645 members, each”. This seems to be incorrect and should be 65 members, as was found in the method section of the article. In addition, I have a question about the reasons for not using the monofilament polyglactin (commercially known as Monocryl). Monocryl features all the advantages of Vicryl, as it is as semi-absorbable as Vicryl, and in addition has a lower chance of infection and inflammation (4, 5). Moreover, the authors suggested in the conclusion section of the abstract that, “Vicryl sutures can safely be used for skin and subcutaneous wound suturing even when our surgery site is not ideally clean.” It seems that this conclusion is not in accordance with the aim of study, as the cleanliness

of the wound was not tested in this study. Therefore, it would be better to present a conclusion about the effect of Vicryl in non-clean appendectomies, rather than stating general comments. Finally, the sample size seems to be a major limitation of this study, as the authors considered.

References

1. Golchini A, Nikzad Jamnani HA, Ahmadi S, Karimi E, Pourahmad S, Safarpour AR. Comparison of Infection Incidence Between Appendectomy Skin Incisions Sutured by Nylon and Polyglactin (Vicryl). *Ann Colorectal Res.* 2015;3(3):30179.
2. Cartmill BT, Parham DM, Strike PW, Griffiths L, Parkin B. How do absorbable sutures absorb? A prospective double-blind randomized clinical study of tissue reaction to polyglactin 910 sutures in human skin. *Orbit.* 2014;33(6):437-43. doi: 10.3109/01676830.2014.950285. [PubMed: 25244631]
3. Rasic Z, Schwarz D, Adam VN, Sever M, Lojo N, Rasic D, et al. Efficacy of antimicrobial triclosan-coated polyglactin 910 (Vicryl* Plus) suture for closure of the abdominal wall after colorectal surgery. *Coll Antropol.* 2011;35(2):439-43. [PubMed: 21755716]
4. Steingrimsson S, Thimour-Bergstrom L, Roman-Emanuel C, Schersten H, Friberg O, Gudbjartsson T, et al. Triclosan-coated sutures and sternal wound infections: a prospective randomized clinical trial. *Eur J Clin Microbiol Infect Dis.* 2015;34(12):2331-8. doi: 10.1007/s10096-015-2485-8. [PubMed: 26432552]
5. Masini BD, Stinner DJ, Waterman SM, Wenke JC. Bacterial adherence to suture materials. *J Surg Educ.* 2011;68(2):101-4. doi: 10.1016/j.jsurg.2010.09.015. [PubMed: 21338964]