Letter to Editor



Platelet-Rich Plasma in Sphincteroplasty

Mohammad Rezazadehkermani1* 💿

¹Colorectal Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

*Corresponding authors: Mohammad Rezazadehkermani, Colorectal Research Center, Faghihi Hospital, Zand Blvd, Postal Code: 71348-44119, Shiraz, Iran. Tel:+98 71 32330724; Fax: +98 71 32331006 Email: rezazadehkermani@yahoo.com

Received: 01-04-2020 **Accepted:** 06-04-2020

Please cite this paper as: Rezazadehkermani M. Platelet-Rich Plasma in Sphincteroplasty. Ann Colorectal Res. 2020;8(1):40. di: 10.30476/ACRR.2020.46537.

Dear Editor

In this article, I review the interesting manuscript titled "Effects of Platelet-Rich Plasma on Healing of Sphincteroplasty: An Experiment in Rabbit Model" (1) about application of Platelet-Rich Plasma in anal sphincteroplasty.

While reviewing the article in which a novel idea was proposed for improving the outcome of sphincteroplasty, three issues were questionable for me:

The first issue is the site of sphincterotomy, which was mentioned as the posterior midline. It is known that the external anal sphincter is connected posteriorly to the anococcygeal ligament (2), and division at this point is not always associated with separation of the sphincter and fecal incontinence.

The second is that animal experiments on the anal sphincter are different on the basis of sphincter function rather than anatomically, and if sphincterotomy is done on an animal, then the impaired functioning should be demonstrated (3) before further intervention. Due to the small size of the sphincter complex in small animals, it is sometimes hard to understand the exact territory of the muscle.

The last questionable topic in this article is outcome analysis. This report only investigates the different histopathologic healing markers that may occur after any type of injury in any type of tissue. In sphincteroplasty, we want to know whether or not the sphincter complex that had been divided regains its unity. Hence, it is essential to know that we have sphincter muscle fibers or fibrotic tissues that connect the divided sphincter to each other in the field of defect. We also believe that rather than just anatomic evaluation, physiologic evaluation should also be used in the animal model of sphincteroplasty, which is best achieved by manometry or electromyography (4).

Other than the proposed issues, this article presents a novel adjunct to sphincteroplasty that might improve the outcome. However, in order to design further studies based on this report, the proposed issues should be addressed.

Conflict of Interests: None declared.

References

- 1. Izadpanah A, Nikzadjamnani H, Safarpour AR, Izadpanah A, Tadayon SMK. Effects of Platelet-Rich Plasma on Healing of Sphincteroplasty: An Experiment in Rabbit Model. Ann Colorectal Res. 2019; 7(3):2-8.
- Corman ML, Bergamaschi RCM, Nicholls RJ, Fazio VW. CORMAN'S COLON and RECTAL SURGERY:

LIPPINCOTT WILLIAMS & WILKINS; 2013.

3. Aghaee-afshar M, Rezazadehkermani M, Asadi A, Malekpour-afshar R, Shahesmaeili A, Nematollahi-mahani SN. Potential of Human Umbilical Cord Matrix and Rabbit Bone Marrow-Derived Mesenchymal Stem Cells in Repair of Surgically Incised Rabbit External Anal Sphincter. Dis Colon Rectum. 2009;52(10):1753-61.

4. Izadpanah A, Rezazadehkermani M, Ghaderi M, Rahimikazerooni S, Safarpour A, Homayounid K, et al. Using amniotic membrane for anal sphincter repair in animal model. j coloproctol. 2016;36(1):40-4

