

## LETTER TO THE EDITOR

(*J Bangladesh Coll Phys Surg 2017; 35: 158-159*)

To  
Editor-in-chief  
Bangladesh College of Physicians and Surgeons

Sir,

I would like to thank you for publishing the article 'Prevention of Postoperative Adhesions of Caesarean Section in your prestigious journal (Vol. 35. No 2, April 2017). I have gone through the article. The article is very nice, content are full of information and well presented.

Adhesion formation starts immediately after surgery. After tissue trauma, inflammation brings macrophage, fibroblasts, and a fibrin matrix to the wound surface of the wound. Postoperative adhesions also develop as a response to hypoxia, the body tries to reestablish oxygen and nutrient supply to tissues that have been injured by surgery or previous pathology.<sup>1</sup> During normal healing without adhesions, the fibrinous mass is removed by fibrinolysis, before fibroblast in growth and deposition of ECM (Extracellular matrix) between injured tissues has been achieved, Theoretically, optimal prevention of adhesion formation requires intervention throughout the critical 7-day period of peritoneal healing. No new adhesion formation occurs after day 7.<sup>2</sup> One of the highly debated and contentious issues regarding adhesion development following lower segment C/S is the closure or non closure of the visceral and parietal peritoneum. Historically, peritoneal closure has been performed to reduce postoperative complications, including adhesions. Review of the literature does not support that the closure of peritoneum prevent adhesions formation.<sup>3</sup>

Antiadhesion barriers like Seprafilm, Oxidized-regenerated cellulose (Interceed) are helpful. NSAIDs have also been recommended to prevent postoperative pelvic adhesions by blocking the production of thromboxanes, which are known to be involved in the

biochemical pathways leading to adhesion formation.<sup>4</sup> Good surgical technique, minimal tissue handling and proper haemostasis is very important.

Finally, I Thank the authors again for highlighting such an important issue and writing the review article.

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### References :

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3. Tulandi T, Al-Jaroudi D. Nonclosure of peritoneum: a reappraisal. *Am J Obstet Gynecol.* 2003;189:609-612.
4. Victor Hugo González-Quintero, MD, MPH, Francisco E. Cruz-Pachano *Rev Obstet Gynecol.* 2009;2(1):38-45]

To  
Editor-in-Chief  
Journal of Bangladesh College of Physicians & Surgeons  
Mohakhali, Dhaka.

Sub: Prevention of Postoperative adhesions of Caesarean Section.

Dear Madam,

Thanks for your appreciation and at the same time raising the issue of peritoneal closure by tulandi etal in 2003. But after 2003 several studies & researches were carried out. Latest by Z.Shi, L ma young, etal had a huge meta-analysis & systemic review, published in

BJOG in 2011, which showed that closure of peritoneum during c/s significantly reduces the risk of adhesion formation.

Moreover meta-analysis by CHEONG & etal in 2009 & Big study by HAMEL etal in 2007 reported closure of peritoneum results significantly fewer adhesion formation.

Finally peritoneal closure is a safe surgical technique which carries no significant short term hazard & there is no significant disadvantage over non-closure of

peritoneum. Therefore, we need to wait for more studies to say in favor of non-closure of peritoneum.

Appreciating your all the comments.

Regards

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