Clinical Image

A Novel Technique for Applying INTERCEED® in Laparoscopic Surgery: The Triangle I-CEED Method

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The use of the GYNECARE INTERCEED® Absorbable Adhesion Barrier (Johnson & Johnson, New Brunswick, NJ, USA) for certain gynecological surgeries is known to reduce hospital costs by decreasing the length of hospital stay and adhesion-related readmissions.[1] However, it tends to curl up and is difficult to apply to peritoneal defects. Several reports have described techniques for applying the Seprafilm® Adhesion Barrier (Baxter, International Inc., Deerfield, IL, USA), an alternative product; however, few reports have described techniques for applying the GYNECARE INTERCEED® adhesion barrier. [2-5] Normally, a GYNECARE INTERCEED® sheet is applied using three forceps; however, the sheet is square in shape [Figure 1a], while the peritoneal defects after hysterectomy are usually triangular [Figure 1b]. Due to this shape mismatch, the sheet often curls up and only covers the defect partially. Therefore, we have developed the novel "Triangle I-CEED" technique for GYNECARE INTERCEED® application; in this, the square sheet is cut along its diagonal to form two triangles, which are easier to handle with three forceps [Figure 1c and Video 1]. In this technique, the vertices of the GYNECARE INTERCEED®'s triangular pieces are placed at the cut-ends of the round ligament, infundibulopelvic ligament, and vaginal cuff using three forceps. The peritoneal defect can be completely covered with two triangles cut from one GYNECARE INTERCEED® sheet [Figure 1d]. With previously reported techniques, the GYNECARE INTERCEED® sheet is difficult to flatten once

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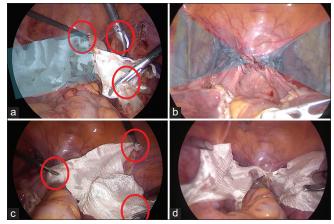


Figure 1: GYNECARE INTERCEED® application to peritoneal defects. (a) The sheet is normally applied with three forceps (red circles). (b) Peritoneal defects are usually triangular. (c) The sheet can be cut into two triangles. (d) The two triangles cover the defect http://www.apagemit.com/page/video/show.aspx?num=280

curled, even if it is applied gently. Furthermore, if the sheet is wet with saline or tissue fluid, it is difficult to cleanly flatten using three forceps. Based on our experience, drying the wet sheet by wiping with gauze involves a lot of work. However, by using our novel technique, the square-shaped GYNECARE INTERCEED® sheet can be cut along its diagonal into two triangles, which can be then be easily flattened with three forceps (as they equal the number of

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the triangles' vertices). Thus, this technique is useful for laparoscopic hysterectomy. This article was submitted with the approval of the institutional review board. Furthermore, the patient's informed consent was obtained through a comprehensive agreement.

Ethical approval

This article submission was conducted with the approval of the Institutional Review Board of Jichi Medical University, Saitama Medical Center (approval number: \$20-131).

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her name and initial will not be published and due efforts will be made to conceal the identity, but anonymity cannot be guaranteed.

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Conflicts of interest

K. Chikazawa received lecture honoraria from Ethicon (Tokyo, Japan), Terumo (Tokyo, Japan), and Chugai Pharmaceutical Co. (Tokyo, Japan). The organizations that provided funding did not contribute to the study design or outcome. There are no other conflicts of interest to declare.

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