Maylard’s incision: how to make an easy incision for complex pelvic abdominal surgery

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The video aims to show the Maylard technique, an extended transverse incision characterized by bilateral ligation of the deep inferior epigastric vessels and transection of the anterior rectus abdominis muscles.1 It is an easy and advantageous alternative to mid-line laparotomy.1,2

The procedure is as follows as shown in Video 1: (1) a transverse skin incision is made at least 4 cm above the symphysis pubis and extended laterally until 3 cm from the anterior superior iliac spines, (2) the subcutaneous tissue and the abdominal fascia are opened with lateral extension up to the external edge of the rectus abdominis muscles, (3) the inferior epigastric vessels are located, ligated, and cut, (4) the rectus abdominis muscles are sectioned between the fingers using an electrocautery device, (5) incision of the transversalis fascia and blunt opening of the parietal peritoneum is carried out, (6) after the surgical procedure, the cut edge of the muscle is secured to the fascia using a delayed-absorbable ‘U’ suture, (7) the parietal peritoneum is not closed, (8) the rectus abdominis muscles do not need approximation.

We mobilize the rectus muscles from the sheet even though the original technique suggested that this should not be done in order to prevent retraction.2 We made this change for better control of the epigastric vessels in case of damage and for teaching purposes. Retraction is prevented with the above-mentioned U-shaped stitches.

Maylard’s incision is a standardized and easily learned procedure. It provides adequate exposure of the abdominal, pelvic, and retro-peritoneal cavities with the advantages of transverse incisions—namely, less hemia formation, low complication rate, and cosmetic results.1–3 In obese patients, it decreases the risk of post-operative complications. If the laparoscopic approach is not possible, it is a sound choice. In women with cervical cancer, as in the Laparoscopic Approach to Carcinoma of the Cervix Trial,4 Maylard’s incision could be a good option.

Some papers have compared Maylard and Pfannenstiel incisions without finding remarkable differences.3 However, for a complex surgery, Pfannenstiel is not the best incision because of its limited exposure of the pelvic anatomy.

We conclude that, unless a mid-line laparotomy is indicated, the Maylard incision is preferable when optimal exposure to the pelvis is required.1,2 Hands-on training should be encouraged.

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