# THE C-SECTION PROCEDURE EXPLAINED

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As pelvic health physiotherapists, we often see and treat women after having a caesarean section delivery. But do we actually know what is happening beneath the surface? We thought that a brief overview of the procedure would contribute to our ability to treat our client as a whole. Please keep in mind that not every mother's experience will be the same as another, and they rarely know what technique the surgeon used. We are presenting you with a general overview of the surgical procedure to help us reach the best outcome we can.

### Stage 1: Skin

Once the mother to be is draped and sterilized for surgery, and after proper anesthetic is administered, one of 3 incisions could be used to begin the procedure. The most common incision is the Pfannenstiel incision - a low, horizontal incision, 2-3 cm above the pubic symphysis. Alternatively, some cases may require a Joel-Cohen incision which would be 4 - 6 cm above the pubic symphysis, or a midline vertical incision which runs from just above the pubic bone, vertically to just below the umbilicus. The latter technique is rarely used these days outside of emergency situations or medical complications.

Figure 1: incisions.
A=Pfannenstiel incision.
B=Joel-Cohen incision.
C=vertical incision.



#### Stage 2: Adipose tissue and abdominal fascia

Smaller horizontal incisions are made through the adipose tissue to expose the abdominal fascia, followed by another horizontal incision in the fascia that exposes the underlying rectus abdominis muscle. The two rectus abdominis muscle bellies are bisected vertically through the linea alba and if needed horizontally. The peritoneum is then exposed and another midline incision is made to expose the uterus.

#### **Stage 3: Uterine incision**

A low-segment transverse uterine incision accounts for 90% of uterine dissections (if medically necessary, alternative incision lines can be performed). Once the uterine incision is complete, the fetal membranes are ruptured and the baby is ready to be delivered.

#### **Stage 4: Delivery**

The baby is pulled from the uterus and suction is used to clear the airways. The umbilical cord is clamped and then cut, and the surgeon then delivers the placenta.

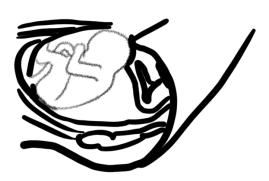


Figure 2: Delivery

#### Stage 5: Closure

The uterus is closed with a double-layer suturing technique (three layers if the more rare vertical incision is used) in an effort to reduce the risk of uterine rupture. The peritoneum and the rectus abdominis are then approximated, and in some cases a few sutures may be used to secure the muscle bellies of the rectus abdominis, though this is not always the case. The abdominal fascia is then secured with stronger sutures, followed by the final stage of skin closure, which can be performed with sutures, staples or surgical glue and is at the surgeons' discretion.

Figure 3: double-layer suturing

#### **Resources:**

Naji, O, Abdallah, Y, et al, Glob. libr. women's med., (ISSN: 1756-2228) 2010; DOI 10.3843/GLOWM.10133

