Should Caesarean sections be performed through elliptical incisions?

Dawlatly B, Aref-Adib M, Koumotsea EV, Elsobky M, Stewart S
Barts Health NHS Trust, Whipps Cross University Hospital, London, United Kingdom

Objective
Is it safe to perform Caesarean section through an Elliptical incision.

Methods

6 Patients had Caesarean section through an elliptical incision between June 2014, and January 2016. The indications were the need to gain access to the upper uterine segment without performing a midline incision. Two patients had lower segment fibroids, 2 had Placenta praevia with suspicion of Accreta, one was only 30 weeks, and the last one was maternal request.

Results

The skin was incised through a low transverse incision that gently curved upwards to about 4 cm above the pubic bone. Another incision was performed from the lateral left edge of the original incision, it extended superiorly and medially to the midline point of the abdomen, and then it curved inferiorly and laterally to join the right edge of the original incision. The skin and fat in-between these two incisions were excised. The maximum width of skin that was removed was 6 cm in the midline part of the abdomen. The rectus sheath was opened at a higher level, in a similar fashion to the Pfannenstiel incision. This was made to allow accessibility to the upper segment of the uterus. The upper segment could easily be identified, and the baby was delivered either through through an upper segment transverse incision, vertical incision or a DeLee incision for the preterm Caesarean section The uterus was sutured in two layers and the rectus sheath was sutured, both using Vicryl 1-0. The skin was closed with Continuous Subcuticular Proline 3-0.

Conclusion

Elliptical skin incisions may have a role in certain cases of Caesarean section when easy accessibility to the upper segment may be needed without contemplating midline longitudinal incisions, which are associated with more complications. Moreover it may have better cosmetic results, as it would remove some of the redundant skin following delivery.