

Abstract

Comparing Efficacy of Octyl-Cyanoacrylate Dermabond Adhesive Glue versus Vicryl 3/0 Suture for Closure of Caesarean Section Skin Incision in UKMMC- A Prospective Randomised Controlled Trial

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Objectives:

To assess efficacy of octyl-cyanoacrylate dermabond adhesive glue versus vicryl 3/0 suture for the closure of caesarean section skin incision in UKMMC.

Methods:

This is a prospective randomised controlled trial conducted at a tertiary hospital on 82 women who underwent caesarean section. The study group, 41 women underwent dermabond skin closure whereas the control group, 41 women had subcuticular vicryl skin closure. Anaesthesia, prophylactic antibiotic, operative technique and post-operative oral analgesia was standardised between both groups. Outcomes that were measured at day 2 before discharge and at postoperative day 10-14 were pain score using VAS, duration and total analgesic dose (after day 2), time taken for skin closure and adverse events between both groups in particular inflammation, surgical site infection and allergic reaction (itching).

Results:

Pain score at Day 2 were similar between both groups (4.0 vs 5.0, $p=0.09$) whereas pain score at Day 10-14 was significantly lower in dermabond skin closure (2.0 vs 4.0, $p<0.001$). Median duration (after day 2) of use of oral analgesia among dermabond skin closure group was 4 days and 6 days among subcuticular vicryl skin closure group, the difference was statistically significant ($p<0.001$). The median amount of additional analgesia required was a third less in the dermabond adhesive group as compared to control. Operative time skin closure was significantly faster in the dermabond skin closure group with mean difference of 97.7 seconds (170.8 vs 268.5, $p<0.001$). At day 10-14, wound inflammation, surgical site infection and itching were similar in both groups.

Conclusion:

Dermabond adhesive glue may be safely used for closure of caesarean section skin incision. It is efficacious, less painful, faster application and needing lower analgesic dose with similar adverse events.