

Tertiary-level study of the implementation of a technique checklist for cesarean deliveries at a University Hospital in Uruguay

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Introduction: The proportion of deliveries performed as cesarean delivery is increasing worldwide; variations exist between countries primarily between low and high income countries and between different healthcare providers. Operative cesarean delivery techniques are varied and have changed over time; different authors have developed techniques in attempts to reduce both maternal and fetal adverse events, as well as shortening operative times. The implementation of checklists into surgical procedures has been demonstrated to reduce the frequency of major post-operative adverse events and it is estimated that half of the adverse events that arise from surgical procedures are preventable.

Objective: To assess in a university service adherence to the implementation of a checklist for cesarean sections and to evaluate whether this improves compliance with its items or not.

Methodology: A transversal, cross-sectional cohort study was undertaken in two periods, before and after a checklist implementation for cesarean deliveries, applied to maternity in a university hospital. The variables were the checklist application and the comparison with the coverage of its items.

Results: 301 cesarean section surgical descriptions were analyzed. The complete application included 28 cases (16%). The application percentage for each variable varied from 4.9% to 96%. Its implementation increased the probability of items compliance, usage of prophylactic cefazolina OR 8.35 (CI 95%, 3.74-20.9), usage of chlorhexidine OR 8.98 (CI 95%, 3.72-23.7), cord traction for third-stage labor OR 2.26 (CI 95%, 1.33-3.85) and double-layer hysterorrhaphy OR 3.65 (CI 95%, 2.09-6.55).

Conclusions: The adherence to the checklist implementation was low. Its implementation improved the knowledge of the perioperative technique and increased the items compliance, which was 2 to 8 times higher, improving the surgical quality. Given that current evidence demonstrates that the inclusion of a checklist can decrease post-operative adverse events, the heterogeneous surgical practice at the study institution justified the application of a checklist to homogenize treatment. The present study also demonstrated that the introduction of the checklist increased the use of several surgical techniques, potentially improving overall surgery quality.

Biography

Stephanie Viroga is a gynecologist, specialist in endocrinology gynecology and the coordinator of sexual and reproductive services. She is also an assistant professor of Gynecology in Maternity Hospital Pereira Rossell. She serves as the co-coordinator of Clinical Investigation Unit Pharmacologist and Co-Director of Drugs Information Center at National University. Also designated as the assistant professor of Pharmacology and Specialist in drugs and pregnancy in Universidad de la República, Montevideo Uruguay.

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