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Original Research Article

Comparison of the Effect of Different Serums on the Acid-base Status of Women Elective Cesarean Section Candidates

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ABSTRACT

Introduction: Ringer-lactate serum has not been used for fluid therapy around cesarean section due to its positive effects on acid-base status, and few studies have compared these two. The type of serum was not performed in cesarean section, so the aim of this study was to compare the effects of 0.9% sodium chloride serum with Ringer lactate serum on maternal acid-base status in elective cesarean section. **Material and Methods:** This study is a clinical experience that was performed with the participation of 60 women candidates for elective cesarean section in Al-Zahra Hospital (Tabriz University of Medical Sciences). Women were divided into two different groups and in each group different serum was injected for the patient; Before and after cesarean section, 2 cc of arterial blood was taken from women and the number of acid-base changes was measured at different times. **Results:** maternal pH and BE in the 0.9% sodium chloride group changed from 7.4 and -1.1 before surgery to 7.32 and -4.8 after surgery, respectively. Which indicates the occurrence of acidosis in this group that these changes are statistically significant (p=0.01). In the ringer lactate group, only in BE before and after surgery, it indicates acidosis in this group (from -0.6 to -3.1) and is significant (p=0.01). **Conclusion:** it can be concluded that 0.9% sodium chloride in comparison with lactate ringer causes acidosis in mothers under elective cesarean section with spinal anesthesia.

Keywords: Acid-Base, Cesarean Section, Serums Therapy.

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