TITLE: Prevention of spinal induced Hypotension by preloading with crystalloids

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Keywords : Spinal Anaesthesia , Hypotension , crystalloids

Introduction : Spinal Anaesthesia is one of the most popular anaesthetic technique used for surgery below umbilicus. Hypotension is one of the most common side effect of spinal anaesthesia. This study was undertaken to evaluate whether preloading patients with crystalloids can help in preventing hypotension caused by spinal anesthesia.

Methods: In this study, 30 patients who underwent surgery below umbilicus were studied. All the patients were preloaded with Ringer lactate 20 minutes before surgery. Patients were observed for fall in blood pressure after sub arachnoid block and the use of vasopressors( mephentermine). Other vitals which were observed was HR, DBP, MAP and SPO2 throughout the surgery.

Results : the results of the study shows that there was a significant decrease in SBP at 30 minutes interval ( p value =0.0219) and MAP at 30 minutes interval ( p value=0.0096). There was no significant change in Heart rate at any point throughout the surgery.

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| **Baseline MAP** | **Following induction of anesthesia** | **P value** |
| 97.82 ± 2.75 | 96.90 ± 2.54 (at 5 mins) | 0.1835 |
| 97.82 ± 2.75 | 96.72 ± 2.14 (at 10 mins) | 0.0891 |
| 97.82 ± 2.75 | 96.69 ± 2.23 (at 15 mins) | 0.0857 |
| 97.82 ± 2.75 | 97.10 ± 2.10 (at 20 mins) | 0.2591 |
| 97.82 ± 2.75 | 95.99 ± 2.54 (at 30 mins) | 0.0096 |

Conclusions : Preloading with Ringer lactate 20 minutes prior to surgery is effective in preventing Spinal Anaesthesia Induced Hypotension.

References:

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