

## Effect of intravenous single dose of aminophylline on prevention of post dural puncture headache in patients who underwent spinal anesthesia : double blind randomized trial study

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### Abstract

**Background and Objective:** Post dural puncture headache (PDPH) is a relatively common complication in spinal anesthesia. Several regimens had explained for treatment of this problem. The aim of this study was to determine the effect of intravenous single dose of Aminophylline (1.5mg/kg/body weight) on the incidence of PDPH in cesarean section under spinal anesthesia.

**Materials and Methods:** In a double blind randomized trial study, 120 patients undergone spinal anesthesia for the elective cesarean section in Motahhari hospital of Marvdasht in Fars province in south of Iran during 2008. After umbilical cord clamping 1.5mg/kg/body weight of Aminophylline injected slowly and intravenously in 60 patients. In placebo group (n=60) normal saline injected intravenously. At the 1<sup>st</sup>, 4<sup>th</sup>, 24<sup>th</sup> and 48<sup>th</sup> hour after surgery, PDPH in patients were evaluated.

**Results:** The incidence of PDPH was significantly lower in cases compared with controls during the first 24 hours post operation (5% vs. 31.7%, P<0.001). Incidence of PDPH in case and control groups after 48 hours was 5% and 23.3% respectively (P<0.004).

**Conclusion:** This study revealed that the intravenous single dose of Aminophylline (1.5mg/kg/body weight) significantly reduced PDPH after spinal anesthesia in cesarean section.

**Keywords:** Aminophylline, Post dural puncture headache, Cesarean section, Spinal anesthesia

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