

## عنوان مقاله:

A Comparative Study in Influence of Isoflurane and Propofol on IL-1, IL-6, TNF- $\alpha$  Serum Levels after Craniotomy for Supratentorial Brain Tumors

## محل انتشار:

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## خلاصه مقاله:

**Background:** The purpose of this randomized, single-center study was to prospectively investigate the impact of anesthetic techniques for craniotomy on the release of cytokines (interleukin (IL)-1, IL-6, tumor necrosis factor factor-alpha (TNF- $\alpha$ )) and to determine whether intravenous anesthesia compared to inhalational anesthesia attenuates the inflammatory response. **Methods and Materials:** The study enrolled 60 patients undergoing craniotomy, allocated into two equal groups to receive either Isoflurane (n=30) and Propofol (n=30). Non-invasive hemodynamic monitoring was used. Serum levels of IL-1, IL-6 and TNF- $\alpha$  were evaluated before and at the end of surgery and anesthesia. **Results:** Although there was a significant rise in serum level of inflammatory cytokine but compared with patients anaesthetized with Isoflurane, patients who received Propofol had significant lower levels of IL-1, IL-6 and TNF- $\alpha$  after surgery ( $p < 0.05$ ). **Conclusion:** Patients who received Propofol had lower levels of IL-1, IL-6 and TNF- $\alpha$  after surgery. Our findings should incite future studies to prove a potential medically important anti-inflammatory role of Propofol in neuroanesthesia.

## کلمات کلیدی:

Craniotomy, Propofol, Isoflurane, Interleukin 1, Interleukin 6, TNF- $\alpha$

## لینک ثابت مقاله در پایگاه سیویلیکا:

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