

Turkish Journal of Medical Sciences



Turkish Journal
of
Medical Sciences

Remifentanil Infusion and Paracervical Block Combination Versus Remifentanil Infusion Alone During In Vitro Fertilisation (IVF)

Ertan ÖZTÜRK¹, Berrin GÜNAYDIN¹, Onur KARABACAK², Bilge TUNCER¹, Mehmet ERDEM², Ahmet ERDEM², Bülent TIRAŞ², Kadir KAYA¹

¹Department of Anesthesiology, Faculty of Medicine, Gazi University, Ankara - Turkey

²Department of Gynecology and Obstetrics, Faculty of Medicine, Gazi University, Ankara - Turkey

 [Keywords](#)
 [Authors](#)



medsci@tubitak.gov.tr

[Scientific Journals Home Page](#)

Abstract: The aim of this study is to compare two accepted techniques; intravenous (IV) remifentanil infusion versus its combination with paracervical block (PCB) in patients undergoing transvaginal ultrasound guided oocyte retrieval (TUGOR). One hundred unpremedicated patients were divided into two groups to receive either IV remifentanil (Group R) or IV remifentanil plus PCB (Group R+PCB). After monitoring cardiopulmonary parameters, remifentanil infusion of $0.25 \mu\text{g kg}^{-1} \text{min}^{-1}$ was started in both in groups. Additionally, when the patient felt dizzy, PCB with 10 ml 1% lidocaine was performed only in Group R+PCB followed by remifentanil infusion reduction to $0.15 \mu\text{g kg}^{-1} \text{min}^{-1}$. Hemodynamic and respiratory parameters, adequacy of analgesia by Simple Numerical Rating Scale (SNRS), total amount of remifentanil used, pregnancy rates and side effects were recorded. Hemodynamic changes remained within clinical limits. There were clinically insignificant changes in peripheral oxygen saturation (SpO_2) and end tidal carbon dioxide (ETCO_2) and they returned to baseline at the end of the procedure. SNRS higher than 3 at the time of 1st ovarian puncture was observed in 6 and 0 patients, in Groups R and R+PCB, respectively ($P < 0.05$). The total amount of remifentanil used (μg) was significantly higher in Group R (571.8 ± 167.4) than in Group R+PCB (357.2 ± 93.6). Pregnancy rates were 60% and 48% for Groups R and R+PCB, respectively ($p = 0.048$). The incidence of nausea+vomiting was higher in Groups R (42%) than in Group R+PCB (20%) ($P < 0.05$). Addition of PCB to IV remifentanil infusion was found to be superior in pain relief during 1st ovarian puncture and reduced the incidence of nausea+vomiting with respect to IV remifentanil infusion alone.

Key Words: Paracervical block; lidocaine, remifentanil; IVF

Turk J Med Sci 2006; **36**(2): 105-111.

Full text: [pdf](#)

Other articles published in the same issue: [Turk J Med Sci, vol.36,iss.2.](#)