

Efek Lidokain Intravena terhadap Nilai *Numeric Rating Scale* dan Kebutuhan Fentanil Pascaoperasi dengan Anestesi Umum

Theresia C. Sipahutar,¹ Iwan Fuadi,² Tatang Bisri²

¹Rumah Sakit Siloam TB Simatupang, ²Departemen Anestesiologi dan Terapi intensif Fakultas Kedokteran Universitas Padjadjaran/Rumah Sakit Dr. Hasan Sadikin Bandung

Abstrak

Lidokain intravena mempunyai efek analgesia, antihiperalgnesia, dan antiinflamasi. Penelitian ini bertujuan untuk mengetahui efek pemberian lidokain intravena terhadap nilai *numeric rating scale* (NRS) dan kebutuhan fentanil pascaoperasi eksisi fibroadenoma *mammae*. Penelitian ini merupakan uji klinis acak terkontrol buta ganda terhadap 40 orang pasien wanita usia 18–60 tahun dengan status fisik ASA I–II yang dilakukan di Rumah Sakit Dr. Hasan Sadikin Bandung periode September 2011–Februari 2012. Sampel dikelompokkan random menjadi kelompok lidokain dan kontrol. Penilaian nyeri menggunakan *numeric rating scale*. Data dianalisis menggunakan uji chi-kuadrat, uji-t, dan Mann Whitney dengan tingkat kepercayaan 95% dan dianggap bermakna bila $p < 0,05$. Hasil penelitian menunjukkan nilai NRS kelompok lidokain lebih rendah dan berbeda bermakna pada 30 menit ($p < 0,001$), 60 menit ($p < 0,001$), 90 menit ($p = 0,003$), dan 120 menit ($p = 0,011$) pascaoperasi, penggunaan fentanil pertolongan pada kelompok lidokain adalah 0–25 μg dan pada kelompok kontrol 25–75 μg selama 3 jam pascaoperasi. Simpulan penelitian adalah lidokain intravena 1,5 mg/kgBB bolus sebelum induksi dilanjutkan dosis rumatan 1 mg/kgBB/jam sampai 1 jam pascaoperasi mampu menurunkan nilai *numeric rating scale* dan mengurangi kebutuhan fentanil pascaoperasi.

Kata kunci: Kebutuhan fentanil pascaoperasi, lidokain intravena, *numeric rating scale*

The Effect of Intravenous Lidocaine on Numeric Rating Scale Value and Post operative Fentanyl Requirement in General Anesthesia

Abstract

Lidocaine has analgesic, anti-hyperalgesic and anti-inflammatory properties. This was a double blind randomized controlled trial study on 40 female patients, aged 18–60 years old with ASA physical status I–II who underwent excisional biopsy for fibroadenoma *mammae* at Dr. Hasan Sadikin General Hospital Bandung between September 2011–February 2012. The samples were randomly divided into the lidocaine and the control group. Quality of post operative pain was assessed using the numeric rating scale (NRS). The results were analyzed with chi-square test, t-test, and Mann Whitney Test with 95% confidence interval and considered significant if the p value < 0.05 . The results showed that in comparison to the control group, the NRS values obtained from the lidocaine group was significantly different in post operative measurement time, 30 minutes ($p < 0.001$), 60 minutes ($p < 0.001$), 90 minutes ($p = 0.003$), and 120 minutes ($p = 0.011$) the dose range of fentanyl as a rescue analgesic in 3 hours post operative period for the lidocaine group was 0–25 μg and 25–75 μg for the control group. This study concluded that administration of 1,5 mg/kgBW lidocaine intravenous before induction and continued with 1 mg/kgBW/hour as maintenance dose until 1 hour post operative is able to reduce the NRS score and the requirement of post operative fentanyl.

Key words: Intravenous lidocaine, numeric rating scale, post operative fentanyl requirement

Korespondensi: Theresia C. Sipahutar, dr., SpAn. M.Kes, Siloam Hospital TB Simatupang Jl. RA. Kartini No. 8. Cilandak, Jakarta Selatan, *Mobile* 081320703619, *Email* theresia.sipahutar@siloamhospitals.com