

**PENGARUH KOMPRES ES GEL TERHADAP TINGKAT NYERI DAN
INFLAMASI PADA PASIEN PATAH TULANG PASCA OPERASI
OPEN REDUCTION INTERNAL FIXATION (ORIF)**

ABSTRAK

Pendahuluan: Prosedur operasi ORIF menyebabkan nyeri akibat perlukaan jaringan yang menyelimuti tulang, tubuh melepas mediator inflamasi sehingga muncul pembengkakan, kemerahan dan peningkatan suhu. Tujuan penelitian ini adalah menganalisis pengaruh kompres es gel terhadap tingkat nyeri dan inflamasi pasien pasca operasi ORIF. **Metode:** Metode penelitian menggunakan *quasy experiment post-test only control group design*. Teknik sampling menggunakan *consecutive sampling*. Besar sampel 30 pasien ORIF, berusia dewasa (≥ 18 tahun). Kompres dilakukan 3 kali sehari, dengan durasi 20 menit, pada 24 jam- 72 jam pasca operasi. Nyeri diukur menggunakan *Numeric Rating Scale*, inflamasi diukur dengan alat-alat pengukuran edema, kemerahan, dan peningkatan suhu **Hasil:** Uji statistik menggunakan Mann Whitney U Test dan Independent T Test, $p= 0,001$ ($\alpha \leq 0,05$) untuk variabel tingkat nyeri, $p= 0,014$ variabel edema, $p= 0.291$ variabel kemerahan, dan $p= 0,026$ variabel peningkatan suhu. **Analisis:** Hasil uji statistik membuktikan ada pengaruh kompres es gel terhadap tingkat nyeri, edema dan peningkatan suhu pada pasien patah tulang pasca operasi ORIF, namun pada variabel kemerahan pengaruh tindakan kompres es gel tidak signifikan. **Diskusi:** Peneliti selanjutnya dapat melakukan penelitian yang serupa dengan variabel inflamasi humoral dan juga alat ukurnya.

Kata Kunci: nyeri, inflamasi, ORIF, es gel

**THE EFFECT ICE GEL ON THE PAIN LEVEL AND INFLAMMATION
OF OPEN REDUCTION INTERNAL FIXATION
POSTOPERATIVE PATIENTS**

ABSTRACT

Introduction: ORIF caused pain due to tissue injury, human body produced inflammatory mediators that result swelling, redness and increase of temperature. The purpose of this study to analysis the effect of ice gel compress on the level of pain and inflammation of ORIF postoperative patients. **Method:** Quasy experiment with post-test only control group design. Sampling technique was used consecutive sampling. A sample size 30 patients of ORIF, adult age (≥ 18 years). The intervention done 3 times a day, and the duration was 20 minutes, at 24 hours up to 72 hours postoperative ORIF. Level of pain was measured by Numeric Rating Scale instrument, and the inflammation variable was measured by some devices that observes edema, redness, and temperature increase. **Results:** Statistical test was used Mann Whitney U Test and Independent T Test, $p= 0,001$ ($\alpha \leq 0,05$) for variable of pain, $p= 0.014$ for variable of edema, $p= 0,291$ for variable of redness, and $p= 0,026$ for variable of temperature. **Analysis:** Statistic was shown that there was significant an effect of ice gel compress on the level of pain, edema and temperature, but on the variable of redness was not significant. **Discussion:** For the next researchers can re-examine with humoral variable and that instruments.

Keywords: pain, inflammation, ORIF, ice gel