

## INTISARI

**Latar belakang.** Osteoarthritis (OA) merupakan penyakit sendi degeneratif, dimana keseluruhan struktur dari sendi mengalami perubahan patologis. Nyeri adalah gejala utama pada osteoarthritis. Terapi ozon merupakan analgesik dan anti inflamasi yang baik yang dapat memblokir phosphodiesterase-A2. Tujuan penelitian ini adalah untuk mengetahui efektifitas terapi ozon sebagai terapi komplementer dalam menurunkan rasa nyeri penderita osteoarthritis.

**Metode.** Jenis penelitian ini adalah *quasy-experimental* dengan desain *pre-test* dan *post-test*. Besar sampel sebanyak 16 responden yang mendapatkan minimal 2 kali terapi injeksi intraartikular ozon dengan usia diatas 25 tahun. Pengambilan data dilakukan selama bulan Mei sampai Juli 2013 di klinik utama Asri Medical Center. Pengukuran menggunakan skala nyeri VAS segera sebelum dan sesudah injeksi intraartikular ozon dengan dosis 100 ug persendi. Data di analisis menggunakan *Willcoxon*.

**Hasil.** Rerata skor VAS saat istirahat sebelum dan sesudah terapi ozon berturut-turut  $5,3750 \pm 1,14746$  dan  $3,75 \pm 0,93095$  (*Willcoxon test, p=0,001*). Rerata skor VAS saat berjalan sebelum dan sesudah terapi ozon berturut-turut  $7,125 \pm 1,20416$  dan sesudah terapi  $5,1875 \pm 1,327759$  (*Willcoxon test, p=0,001*).

**Kesimpulan.** Terapi komplementer ozon efektif dalam menurunkan rasa nyeri pada penderita osteoarthritis sehingga terdapat perbaikan VAS setelah terapi.

**Kata kunci:** nyeri, VAS, osteoarthritis, terapi ozon, terapi komplementer

## ABSTRACT

**Background.** Osteoarthritis (OA) is a degenerative joint disease, in which the whole structure of the joint changes pathologically. Pain is the main symptom in osteoarthritis. Ozone therapy is a proper analgesic and anti-inflammatory therapy that could block phosphodiesterase-A2. Aim of this study was to determine the effectiveness of ozone therapy as a complementary therapy in reducing osteoarthritis pain.

**Method.** This research study design was quasy-experimental with pre-test and post-test. Sample size were 16 respondents who received at least 2 times intraarticular injection of ozone therapy and over 25 years old. Data collection was conducted during May to July 2013 in Asri Medical Center main clinic. Measurements was done immidiately by using VAS pain scale before and after intraarticular injection of ozone with the dosage of 100 ug for each joint. Data were analyzed using Willcoxon.

**Results.** The mean VAS scores at rest before and after ozone therapy respectively  $5,3750 \pm 1,14746$  and  $3,75 \pm 0,93095$  (Willcoxon test,  $p = 0,001$ ). The mean VAS score during walking before and after ozone therapy respectively  $7,1251 \pm 1,20416$  and after therapy  $5,1875 \pm 1,327759$  (Willcoxon test,  $p=0,001$ ).

**Conclusion.** Ozone complementary therapy is an effective way for reducing pain in patients with osteoarthritis so that there was a VAS improvement after therapy.

**Keywords:** pain, VAS, osteoarthritis, ozone therapy, complementary therapy