

## INTISARI

### EFEKTIVITAS METILPREDNISOLON INTRAVENA DOSIS KUMULATIF 3 GRAM TERHADAP PARAMETER KLINIS DAN RADIOLOGIS PADA PASIEN OFTALMOPATI GRAVES FASE AKTIF SEDANG – BERAT

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**Tujuan:** Menilai perubahan parameter klinis dan parameter radiologis pada pasien oftalmopati graves aktif sedang-berat setelah pemberian metilprednisolon intravena dosis kumulatif 3 gram.

**Metode:** Penelitian ini merupakan studi eksperimental dengan desain one group pretest-posttest. Pasien oftalmopati graves aktif sedang-berat mendapat terapi metilprednisolon intravena dosis kumulatif 3 gram dengan regimen pemberian 6 minggu. Evaluasi parameter klinis dan radiologis dilakukan sebelum dan setelah pemberian terapi. Parameter klinis yang dinilai yaitu clinical activity score (CAS), fisura palpebra, proptosis dan skor diplopia. Parameter radiologis dinilai berdasarkan hasil CT scan yaitu ketebalan otot ekstraokular yang mengalami gambaran penebalan coca-cola bottle sign. Efektivitas dinilai berdasarkan kriteria responder steroid.

**Hasil:** Terdapat perbaikan pada parameter klinis. Rata-rata CAS sebelum dan setelah terapi yaitu  $3,29 \pm 0,12$  dan  $0,95 \pm 0,21$  ( $p < 0,001$ ). Rata-rata fisura palpebra sebelum dan setelah terapi yaitu  $11,70 \pm 1,94$ mm dan  $10,70 \pm 1,85$ mm ( $p < 0,001$ ). Rata-rata proptosis sebelum dan setelah terapi yaitu  $21,14 \pm 1,94$ mm dan  $20,00 \pm 1,58$ mm ( $p < 0,001$ ). Skor diplopia membaik pada 3 pasien ( $p = 0,855$ ). Terdapat perbaikan pada parameter radiologis. Ketebalan rata-rata otot yang mengalami coca-cola sign sebelum dan sesudah terapi yaitu  $4,43 \pm 1,00$ mm dan  $3,42 \pm 0,76$ mm ( $p < 0,001$ ). Efektifitas terapi berdasarkan kriteria responder steroid adalah 79%.

**Kata kunci:** oftalmopati graves, parameter klinis, parameter radiologis, metilprednisolon

## ABSTRACT

### EFFECTIVENESS OF INTRAVENOUS METHYLPREDNISOLONE CUMULATIVE DOSE 3 GRAM ON CLINICAL PARAMETER AND RADIOLOGICAL PARAMETER OF MODERATE TO SEVERE ACTIVE GRAVES OPHTHALMOPATHY PATIENTS

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**Objective:** Assessed changes in clinical and radiological parameters in patients with moderate to severe active Graves' ophthalmopathy after administration of intravenous methylprednisolone at a dose of 3 g.

**Methods:** This is an experimental study with one group pretest-posttest design. Patients with active moderate-to-severe Graves' ophthalmopathy were treated with intravenous methylprednisolone at a cumulative dose of 3 grams with a 6-week regimen. Evaluation of clinical and radiological parameters was evaluated before and after therapy. The clinical parameters assessed were clinical activity score (CAS), palpebral fissure, proptosis, and diplopia score. The radiological parameters that were assessed are the thickness of the extraocular muscles that had a thickened coca-cola bottle sign. Effectiveness were assessed based on the criteria for steroid responders.

**Results:** There was an improvement in clinical parameters. The mean CAS before and after therapy were  $3.29 \pm 0.12$  and  $0.95 \pm 0.21$  ( $p < 0.001$ ). The mean of the palpebral fissure before and after therapy was  $11.70 \pm 1.94\text{mm}$  and  $10.70 \pm 1.85\text{mm}$  ( $p < 0.001$ ). The average proptosis before and after therapy was  $21.14 \pm 1.94\text{mm}$  and  $20.00 \pm 1.58\text{mm}$  ( $p < 0.001$ ). Diplopia scores improved in 3 patients ( $p = 0.855$ ). There was an improvement in radiological parameters. The average thickness of muscles with the coca-cola sign before and after therapy were  $4.43 \pm 1.00\text{mm}$  and  $3.42 \pm 0.76\text{mm}$  ( $p < 0.001$ ). The effectiveness of therapy based on steroid responder criteria was 79%.

**Keywords:** graves ophthalmopathy, clinical parameter, radiological parameter, methylprednisolone