

**PERBANDINGAN NILAI SCHIRMER I
DAN SITOLOGI IMPRESI KONYUNGTIVA
PADA PENDERITA OFTALMOPATI GRAVES NOSPECS 0, I
DAN II
DI RSUP DR M DJAMIL PADANG**

Tesis

**Diajukan sebagai pemenuhan syarat untuk meraih gelar
Dokter Spesialis Mata**

UNIVERSITAS ANDALAS

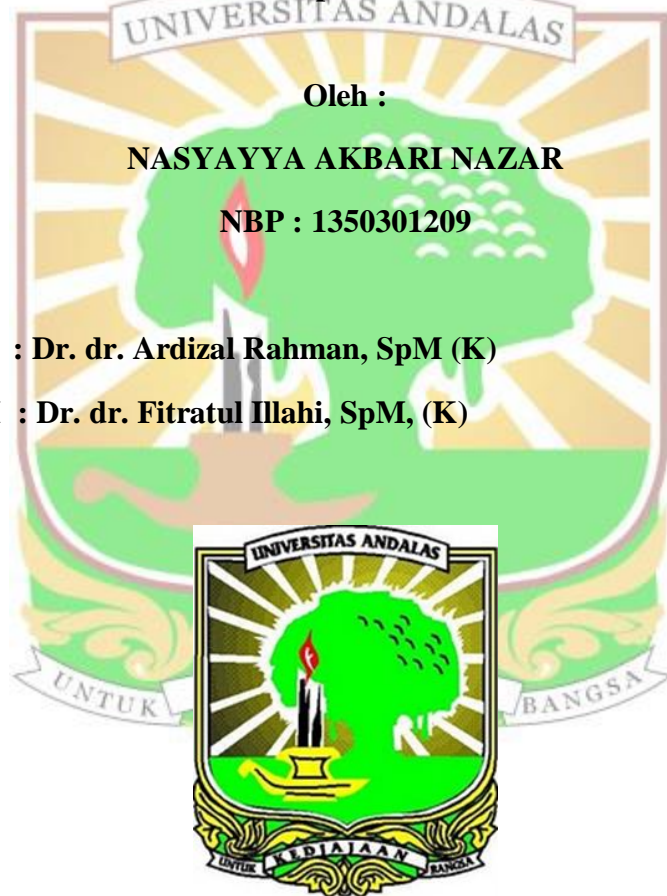
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**PROGRAM PENDIDIKAN DOKTER SPESIALIS MATA
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Abstrak

Pendahuluan : Oftalmopati Graves adalah penyakit inflamasi dari jaringan orbita dan otot-otot ekstraokuler yang diduga disebabkan oleh reaksi autoimun. Oftalmopati Graves merupakan salah satu penyakit yang sering dikaitkan dengan gangguan glandula lakrimal dan sel goblet konyungtiva. Pada penderita oftalmopati Graves tanpa protusio, tanda dan gejala penurunan produksi akuos dan musin dapat terjadi akibat reaksi inflamasi penyakit Graves terhadap glandula lakrimal dan sel goblet konyungtiva pada fase awal perjalanan penyakit Graves.

Metode: Subjek penelitian ini terdiri dari 30 sampel mata pasien oftalmopati Graves , yang dibagi menjadi 3 kelompok sampel NOSPECS 0,I,dan II. Masing-masing kelompok NOSPECS terdiri dari 10 mata sampel. Lapisan *tear film* pasien diukur dengan pemeriksaan Schirmer 1 dan sitologi impresi konyungtiva.

Hasil: Nilai Schirmer 1 kelompok NOSPECS 0 sebesar $12,9 \pm 1,97$ mm; kelompok NOSPECS I sebesar $11 \pm 2,21$ mm; dan kelompok NOSPECS II sebesar $8,4 \pm 1,07$ mm. Hasil pemeriksaan sitologi impresi konyungtiva subyek kelompok oftalmopati Graves NOSPECS 0 paling banyak memiliki derajat 1 (70%), kelompok NOSPECS II paling banyak memiliki derajat 3 (90%), kelompok NOSPECS I memiliki jumlah yang sama banyak pada derajat 2 dan 3 (masing - masing 40%).

Kesimpulan: Nilai Schirmer 1 dan grade sitologi impresi konyungtiva penderita oftalmopati Graves NOSPECS 0 lebih baik dari pada kelompok NOSPECS II, tetapi terlihat penurunan nilai Schirmer 1 dan perburukan grading sitologi impresi konyungtiva seiring peningkatan severitas NOSPECS. Terdapat gangguan lapisan *tear film* pada penderita oftalmopati Graves tanpa protusio NOSPECS 0,I,II (fase awal).

Kata Kunci: Oftalmopati Graves, glandula lakrimal, sel goblet konyungtiva, Schirmer 1, Sitologi Impresi Konyungtiva.

**COMPARISON OF SCHIRMER 1 VALUE AND CONJUNCTIVAL IMPRESSION
CITOLOGY OF IN GRAVES OPHTALMOPATHY PATIENT NOSPECS 0, I AND II AT M
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Abstract

Introduction : Graves' ophthalmopathy is an inflammatory disease of the orbital tissue and extraocular muscles that is thought to be caused by an autoimmune reaction. Graves' ophthalmopathy is a disease that is often associated with disorders of lacrimal gland and conjunctival goblet cells. In patients with Graves' ophthalmopathy without protrusion, signs and symptoms of decreased aqueous and mucin production may result from the inflammatory reaction of Graves' disease to the lacrimal gland and conjunctival goblet cells in the early stages of Graves' disease.

Method: The subjects of this study consisted of 30 eye samples from Graves' ophthalmopathy patients, which were divided into 3 groups of NOSPECS 0, I, and II samples. Each NOSPECS group consisted of 10 sample eyes. The patient's tear film was measured by Schirmer 1 examination and conjunctival impression cytology.

Result: The value of Schirmer 1 with NOSPECS 0 is $12,9 \pm 1,97$ mm; NOSPECS I group of $11 \pm 2,21$ mm; and the NOSPECS II group of $8,4 \pm 1,07$ mm. The results of the conjunctival impression cytology examination, the subjects of the Graves ophthalmopathy group NOSPECS 0 had the most grade 1 (70%), the NOSPECS II group had the most grade 3 (90%), the NOSPECS I group had the same number of grades 2 and 3 (respectively - 40% each).

Conclusion: Schirmer 1 value and conjunctival impression cytology grades in Graves' ophthalmopathy NOSPECS 0 were better than in the NOSPECS II group, but there was a decrease in Schirmer 1 scores and conjunctival impression cytology grades worsened with increasing NOSPECS severity. There is disruption of the tear film layer in patients with Graves' ophthalmopathy without NOSPECS 0,I,II protrusion (early phase).

Keywords: Graves' Ophthalmopathy, lacrimal gland, conjunctival goblet cells, Schirmer 1, Conjunctival Impression Cytology.