

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
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Serum concentration of hyaluronic acid (HA) in Graves' disease

Paves,L; Manso, PG; Martins, JR Purpose: analyse serum concentration of hyaluronic acid (HA) from many patients with Graves' disease, with or without GO, using a non-competitive, ultrasensitive fluoroassay for that compound, and to compare its levels with normal subjects. Methods : One hundred and forty euthyroid patients with Graves' disease. Inclusion criteria were: both sexes, ages between 16-60 years, euthyroidism state for at least 2 months. Patients with previous specific treatment for Graves ophthalmopathy were excluded from study. Graves' disease was confirmed by clinical or laboratorial parameters: previous history of thyrotoxicosis, goiter and exophthalmos, and thyrotropin and free thyroxine measurements. 395 volunteer blood donors from our institution (122 women, 31.6 ± 11.7 years old, and 273 men, 30.5 ± 9.7 years old) were obtained. We assess activity of ophthalmopathy through a clinical activity score (CAS) and patients were classified in two groups, according to CAS. Serum from patients and controls were assayed for HA by a non-competitive fluoroassay. Results: We grouped patients considered to have cronid disease, classified as $CAS \leq 2$ and compared them to patients with active disease, classified as $CAS \geq 3$; the last group (active disease) has, on average, a value that is 3 times higher (mean \pm SD: 32.3 ± 18.1 , median 27.7 mg/L) than patients classified as with inactive GO, $CAS \leq 2$ (mean \pm SD: 10.5 ± 7.0 , median 9.0 mg/L).

Conclusion : Our results show that serum HA measurements might be of use in predicting active or inactive GO. Those with probable retroocular inflammatory activity have significantly higher levels of serum HA than those with inactive eye disease. We also found, using a cut-off of 22.5 μ g/L as an activity parameter, that serum HA has a sensitivity of 87%, a specificity of 92.5%, a positive predictive value of 76.9% and a negative predictive value of 96.1%. Furthermore, we also found that a higher serum HA seems to be associated with active eye disease, because responders to corticosteroids and/or radiotherapy tended to have higher serum HA levels.