Reliability of histamine release test in dust mite allergy: Influence of the degree of sensitization

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SUMMARY. The histamine release test has been proven to be a very useful method for in vitro diagnosis of IgE-mediated allergy to inhalant and food allergens, as well as for the immunotherapy follow-up of the allergic patient. The aim of the present study was to assess the influence of the degree of sensitization in allergic patients sensitive to Dermatophagoides pteronyssinus on their disease-response curves in histamine release tests. To achieve this aim, we studied 109 D. pteronyssinus allergic patients and 25 healthy control subjects. Intracutaneous skin test, D. pteronyssinus allergic patients and 25 healthy control subjects. Intracutaneous skin test, D. pteronyssinus-specific and total IgE quantitations, and histamine release tests were carried out in all the patients. In the case of the histamine release test, five D. pteronyssinus extract concentrations were used (2822.5, 282.25, 28.22, 2.82 and 0.28 UBE/ml), and two patterns of histamine release in sensitive patients were found: one with maximal histamine release at the highest antigen concentration (group I) and the other with maximal release attained at lower concentrations (group II). A sensitization score was designed, after the results from specific IgE and intracutaneous skin tests. The very significant differences (p < 0.05) in antigen-specific and total IgE levels, and in papule diameters and sensitization scores, between the control group and groups I and II. Both groups showed significantly higher (p < 0.05) histamine releases than the control group in response to anti-IgE antibodies. When stimulating the cells with anti-IgE antibodies, histamine release in group II was higher than in group I, although this difference was not significant. Finally, the best correlation between sensitization score and antigen-specific histamine release was found at the 2.82 UBE/ml concentration (r = 0.84, p < 0.001).

Key words
Histamine release - Optimal dose - D. pteronyssinus sensitization - Degree of sensitization

Evaluation of the fibrinolytic system in full-terms neonates

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SUMMARY. Plasminogen activity and antigen, euglobulin fibrinolytic activity, tissue-type plasminogen activator activity and antigen urokinase-type plasminogen activator antigen, plasminogen activator inhibitor-1 activity and antigen, plasminogen activator inhibitor-2 antigen, tissue-type plasminogen activator/plasminogen activator inhibitor complexes, α2-antiplasmin, histidine-rich glycoprotein, and fibrinogen/fibrin degradation products were measured in blood samples taken from the umbilical vein of 100 healthy full-term newborns. Re-
Results were compared with a control group of 30 healthy adults. The overall fibrinolytic activity assessed on fibrin plates was significantly increased (P<0.002). We also observed high tissue-type plasminogen activator activity levels (P<0.001), whereas urokinase-type plasminogen activator antigen levels were lower than in adults. There was a significant reduction in plasminogen activity and antigen (P<0.0001), plasminogen activator inhibitor-1 activity (P<0.05), α2-antiplasmin (P<0.0001), and histidine-rich glycoprotein (P<0.0001), whereas plasminogen activator inhibitor-2 tissue-type plasminogen activator/plasminogen activator inhibitor complexes and fibrinogen/fibrin degradation products did not differ between groups. We conclude that in the newborn there is increased fibrinolytic activity, mainly due to increased plasminogen activators and reduced fibrinolysis inhibition, without systemic fibrinolysis and fibrinogenolysis.

**Key words**
Fibrinolysis – Newborn – Tissue-type plasminogen activator – Plasminogen – Fibrinolysis inhibitors

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**HISTORIA CLÍNICA:**
Varón de 63 años con antecedentes de HTA e intolerancia a la glucosa. En el momento del ingreso presenta insuficiencia renal, hipercalemia e hiperparatiroidismo. La resonancia magnética nuclear mostró una imagen nodular de 4 x 2 cm a nivel de paratiroides derecha.

**FOTO MACROSCÓPICA:**
Pieza de resección de paratiroides que pesa 27 g y mide 5,5 x 4 x 2,5 cm. Su superficie externa es lisa y brillante. Al corte se observa una tumoración blanco-rosada, bien delimitada, con un quiste dominante de 8,5 cm de diámetro máximo y múltiples quistes que oscilan entre 1 y 5 cm.

**DIAGNÓSTICO:**
Adenoma de paratiroides.

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DIAGNÓSTICO:
Adenocarcinoma moderadamente diferenciado de sigma.

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HISTORIA CLÍNICA:
Mujer de 34 años sin antecedentes personales ni familiares de interés que presenta un cuadro de obstrucción intestinal de 15 días de evolución.

FOTO MACROSCÓPICA:
La pieza de resección quirúrgica comprende 17 cm de sigma, en el que se observa un estrechamiento en servilletero, que coincide con una úlcera ovoide de 4 cm de bordes sobreelevados. Obsérvese la dilatación intestinal pre-estenosis.

DIAGNÓSTICO:
Sarcoma de setero.

HISTORIA CLÍNICA:
Mujer de 57 años que desde hace 7 años presenta una tumoraación en nalga izquierda, dolorosa, que le despierta por la noche. El dolor se irradiía por cara posterior del muslo hasta la rodilla asociado a hipoestesia.

FOTO MACROSCÓPICA:
Pieza que pesa 1903 g y que mide 23 x 16 x 10 cm. Al corte se observan dos formaciones redondeadas, rodeadas por músculo que tienden a converger, de coloración blanco-amarillenta con zonas de necrosis. Focalmente la tumoraación infiltra el tejido óseo.

DIAGNÓSTICO:
Cordoma de sacro.

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