First Report of the Use of Skin Prick Test Diagnostic Technique in Horses

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The skin prick test (SPT) was a valuable means of identifying potential allergic triggers in horses with recurrent airway obstruction and may be a step toward the establishment of successful eviction measures and eventually, specific immunotherapy. Authors’ addresses: CIISA, Department of Clinics, Faculdade de Medicina Veterinária, Universidade de Lisboa, Avenida da Universidade Técnica, 1300 – Lisboa, Portugal (Tilley, Luis); Medicina II, Faculdade de Medicina, Hospital Santa Maria, Universidade de Lisboa, 1100 – Lisboa, Portugal (Ferreira); e-mail: paulatilley@fmv.utl.pt. © 2013 AAEP.

1. Introduction
The authors evaluated the response to skin prick tests (SPT) with common aeroallergens in horses with recurrent airway obstruction (RAO).

2. Materials and Methods
Thirty-six horses with RAO and 10 healthy control horses were studied, taking into account the medical history and physical examination, supported by thoracic radiography, respiratory tract endoscopy, and bronchoalveolar lavage cytology. SPT to 16 locally relevant aeroallergens (molds, mites, pollens, and dander) were performed.

3. Results
All horses with RAO had positive SPT results to at least five aeroallergens. Four control horses had all negative SPT results, and six had positive SPT to one to three aeroallergens, although with much lesser reactivity: mean wheal diameter was 30% to 50% of histamine, contrasting with 30% to 127% of histamine for the positive SPT results in horses with RAO.

4. Discussion
The SPT was a valuable means of identifying potential allergic triggers to reduce the allergen load. The SPT may be a step toward accurate determination of allergens to which horses with RAO may be sensitized to establish successful eviction measures and eventually, specific immunotherapy.