Alfa-gal syndrome: five new Italian cases
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Background: Alfa-Gal syndrome, an IgE-mediated immediate-type allergy to the disaccharide galactose—1,3-galactose is relevant as food, drugs, and tick bites allergy. The majority of cases have been found in the southeast area of the United States, but their occurrence in Europe is nonetheless so frequent as to be recognized as a new challenge for allergists.

Report: We present clinical characteristics of 5 Italian Patients with a history of reactions (rash, itching, urticaria) of typically delayed onset following consumption of pork, beef, lamb meat and/or innard. An association with tick bites (Ixodes ricinus) was confirmed in all subjects. As the phenomenon of a delayed-onset immediate-type allergy with a latency of 3–6 h following ingestion of mammalian meat is considered pathognomonic for alfa-Gal syndrome, a Prick-to-prick tests using fresh meat (pork, beef, lamb) and kidney preparations was performed in all Patients. Five Patients showed positive results to pork and beef meat, two of them also to lamb meat. Allergen-specific IgE was measured by ImmunoCAP® alpha-Gal; all patients were sensitized to alpha-Gal (range 2.2–124 kUA/l). All Patients were male, three of them with job exposition to tick bites (1 veterinary, 2 forest guardian), two of them exposed only during holiday on open air or hunting. Interestingly, the veterinary experienced a systemic reaction during cow labor, possibly for cutaneous contact with vagina and placenta.

Clinical Relevance of Report: Epidemiological studies put the prevalence of alfa-Gal sensitization in Europe at 5.5%-8.1% [29], but sensitization rates vary considerably from region to region. As geographically local phenomena may be helpful in our understanding of alfa-gal syndrome, studies on the prevalence are ongoing in Ligurian Region, extending to the populations exposed to tick bites to recognize new cases.

Statement of Consent: We consent for presentation and publication.