

861 Anaphylaxis to Beef, Gelatin and Haemaccel

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RATIONALE: Meat-derived gelatin is commonly added to processed foods. 3 pts were seen initially, 1 allergic to topical & oral gelatin & 2 with anaphylaxis (Ax) to Haemaccel. All subsequently developed allergy to beef, suggesting that gelatin was a trigger.

METHODS: 14 patients with suspected beef/gelatin Ax, 62 controls & 31 with idiopathic Ax (IAX; 14 prospectively) were investigated for gelatin sensitivity by skin testing (ST) & RAST.

RESULTS: 8/14 patients with beef allergy reacted clinically to gelatin on separate occasions; gelatin RAST/ST were positive in 7 & 8/8, respectively. Gelatin ST were positive in 3 additional patients (6-20mm weals). Overall, 3/14 beef allergics had positive beef ST. 3 with negative gelatin ST/RAST had positive RAST to other beef proteins - BSA, bovine gamma-globulin & betalipoprotein IV, betalactobulin. 1/18 recalled IAX patients 1995-2001 had positive gelatin ST. By contrast, ST were negative in RJM (45 occasions) & 62 controls. 10/10 control sera had negative RAST. 92 patients with Ax were evaluated prospectively 2002-3. Triggers were animals, exercise, medication, idiopathic, stings, food allergy, healthy controls (1, 5, 5, 13,18, 47, 2 cases, respectively). Ax occurred after beef in 2/2 with positive gelatin ST, but only 1 had positive beef ST. The beef ST negative subject nonetheless reacted to deliberate Haemaccel challenge (~1.1gm IVI gelatin).

CONCLUSIONS: Gelatin is an important beef allergen and may account for some cases of IAX. A positive ST convey risk for gelatin, meat & Haemaccel Ax which may be missed if one relies only on commercial beef allergens.

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