Fatal anaphylaxis: making sure all cases are counted

Vibha Sharma, 1, 2 Tomaz Garcez, 3 Adam T Fox4

Baseggio Conrado and colleagues note that, although hospital admissions for food induced anaphylaxis increased between 1998 and 2018, the case fatality rate for confirmed food anaphylaxis decreased over this 20 year period, from 0.7% to 0.19%.1

Improved survival might result from better management, but misclassification of deaths should also be considered, especially as fatalities are rare. Having evaluated deaths for the United Kingdom Fatal Anaphylaxis Registry (UKFAR), we raise the following points.

Deaths from anaphylaxis might be mislabelled as asthma2 3 or as sudden and unexpected deaths and require systematic scrutiny. Mislabelling can occur when the trigger of the anaphylactic reaction is different from the known food allergens for that person. Patients with food allergies often restrict diets to reduce risk of exposure, which might increase the possibility of co-existent, undiagnosed food allergies. The cause of fatal anaphylaxis might not be accurately ascertained when the allergen is not on the mandated list of declared allergens or might not have been evaluated after causing a mild reaction.4 5 Variations in coroners’ practices might lead to allergy focused investigation being neglected. Late collection of gastric aspirate samples (several days after anaphylaxis), for example, is unlikely to confirm the relevant allergen.

Optimising data collection is key. Timely specialist evaluations, relevant sample collection, and expert analysis are required. The importance of UKFAR has been emphasised at recent inquests. Founded by Richard Pumphrey in 1994, it is evolving into a national collaboration between the British Society for Allergy and Clinical Immunology and Manchester University NHS Foundation Trust. It seeks support from multidisciplinary teams, including sudden unexpected death in childhood investigation panels, Her Majesty’s coroners, and the UK register of anaphylactic reactions.

Thorough and timely investigations of fatal anaphylactic reactions will reflect trends in the UK more accurately and build on lessons from previous findings of this registry.4 5

Competing interests: VS is custodian of the United Kingdom Fatal Anaphylaxis Registry (UKFAR). TG is an investigator for UKFAR. ATF is president of the British Society for Allergy and Clinical Immunology and chair of the Health Advisory Board of Allergy UK.

Full response at: https://www.bmj.com/content/372/bmj.n251/rr

4 Pumphrey R. Anaphylaxis: can we tell who is at risk of a fatal reaction? Curr Opin Allergy Clin Immunol 2004;4:285-90. doi: 10.1097/01.all.0000136762.89313.0b pmid: 15238794