

OP9 AIRBAG ANAPHYLAXIS? – A CASE OF NEAR DEATH AFTER SAVED BY THE AIRBAG

SYED MUHAMMAD HAFIZ SYED HASSAN¹, NURUL HUDA AHMAD², ZALIZA SINWAN¹

¹ HOSPITAL SELAYANG, SELANGOR, MALAYSIA

² UNIVERSITI TEKNOLOGI MARA, SELANGOR, MALAYSIA

Introduction

Anaphylaxis is a potentially fatal acute generalized systemic reaction, often triggered by exposure to food, drugs or chemicals. This report features a case of delayed anaphylaxis following airbag deployment.

Case Presentation

A 25-year-old man presented to emergency department at 0300H with shortness of breath and difficulty to vocalize. He had a high impact accident approximately 11 hours prior to arriving in ED. His car had hit a divider in which the airbag was deployed and hit his face and chest. However, he did not complain of any symptoms following the accident. 5 hours after, he developed shortness of breath and minimal tongue swelling. He was given antihistamine injection at the local clinic but only improved minimally. His symptoms recurred with worsening shortness of breath and difficulty to speak. On assessment in ED, he had angioedema of the tongue and neck and rhonchi on auscultation. He was immediately given intramuscular adrenaline along with intravenous antihistamine and steroids as well as nebulized salbutamol. Fortunately, his symptoms resolved. Nasolaryngoscopy revealed edematous epiglottis, aryepiglottic folds and arytenoids. He denied history of allergies and did not consume anything after the incident to trigger the anaphylaxis.

Case Discussion

Airbags are a great development in car safety but have brought with them new medical concerns. Sodium azide is best known as the chemical found in automobile airbags which explodes after vehicle impact and generate nitrogen gas to inflate the airbag. A person can be exposed to sodium azide through various routes but in airbag deployment, direct contact and inhalation are most probable. Accidental exposure from airbag has been reported to cause contact dermatitis, burns, exacerbation of asthma and pneumonitis. Inhalation of sodium azide in toxic levels has been associated with respiratory distress, pulmonary edema, and cardiopulmonary failure. Close monitoring and longer observation may be warranted especially in those with higher allergic risk. There is no literature report of anaphylaxis to sodium azide to date. This interesting case offers new discussion regarding allergy reaction to sodium azide.

Conclusion

Anaphylaxis to sodium azide from airbag deployment is rare but potentially life-threatening. Prompt detection and management is fundamental in emergency department.

Keywords

Anaphylaxis, Airbag, Sodium Azide