PARACETAMOL INDUCED ANGIOEDEMA: MORE DETAILS

REQUIRED

Sir,

I have read with keen interest the case report of a 4-year old boy who supposedly developed angioedema due to paracetamol.^[1] The authors have attempted to justify with reasons that the angioedema was most likely due to paracetamol. The patient was treated for presumed viral infection; yet, the viral infection was not considered a possible cause of the angioedema. The fact that the reaction occurred within an hour of receiving the first dose of paracetamol and that it happened on just a single occasion made the reaction acute angioedema.^[2] The commonest cause for a single isolated attack of angioedema is probably viral infection. Viruses are usually blamed because immune response to environmental microbes may take an odd course to produce angioedema. This explanation is thought to be likely when this kind of reaction occurs in children.^[2]

A good past medical and drug history is a cornerstone to preventing and managing adverse drug reactions.^[3] Unfortunately, it was not properly explored in the patient. A previous report of hypersensitivity to paracetamol has shown a high incidence in children with personal/familial history of atopy or previous reaction to non-steroidal anti-inflammatory drugs (NSAIDs), acetylsalicylic acid (ASA) and antimicrobials.^[4] One wonders if this was the first episode of fever in this patient's lifetime. If not, how were they treated? Previous fever episodes were likely to have been treated with paracetamol or NSAIDs. Self-medication is a recognized problem in India^[5] and other developing countries.^[6] Paracetamol remained one of the most commonly self-medicated medicines for children and the medicine mostly kept at home by parents,^[6] therefore the likelihood of use of paracetamol or other medicines with potential for hypersensitivity reactions is high in the patient reported. The previous use of paracetamol, NSAIDs, ASA or antimicrobials might have sensitized the patient to produce the reported angioedema in a manner similar to type I allergic reaction or an aberrant non-allergic reaction, otherwise called idiosyncratic reaction.^[7] The only way to establish paracetamol hypersensitivity in this patient is to take a good clinical history or do oral challenge tests for NSAIDs, ASA and paracetamol when clinically stable.^[3] Unfortunately these were not done. The oral challenge tests should be performed in the hospital, under strict supervision.

is equally important in this case. The shelf
life and stability of medicines kept at home, especially on a warm climate, are known to decrease over time, thereby increasing loss
of potency and possible toxicity.^[6] The use of contaminated and adulterated paracetamol for children was responsible for multiple adverse reactions culminating in deaths in Nigerian children.^[8]
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The formulation and source of the paracetamol

Overall, the case report was interesting but left so many questions unanswered. Publication of case reports describing suspected adverse reactions to drugs and medical products should provide sufficient details for either a differential diagnosis or provisional assessment of cause-effect association, or a reasonable pharmacological or biological explanation for the reaction.

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