

Propofol-Induced Localised Cutaneous Allergic Reactions

Sir,

A 55-year man had no history of medicine or food allergies. The patient received an injection of propofol via an indwelling needle on the dorsal hand. Within 10 seconds, the patient developed wheal-like lesions on the palm and dorsal surfaces of the right forearm (Figure 1), confined to these areas without involvement of other body parts. Propofol was the sole anaesthetic administered, as sufentanil and cis-atracurium had not yet been used. The patient's mean arterial pressure dropped from 85 mmHg to 70 mmHg, and heart rate increased from 80 bpm to 105 bpm, without bronchospasm or hypoxaemia. Ten milligrams of dexamethasone were immediately given intravenously, resolving the lesions within 5 minutes. The surgery proceeded successfully under general anaesthesia, with no recurrence postoperatively.



Figure 1: Cutaneous lesions on the right forearm. (A) Palm surface. (B) Dorsal surface.

Although rare, anaphylactic reactions can range from cutaneous wheals in mild cases to cardiopulmonary dysfunction or death in severe cases. The incidence of perioperative anaphylaxis is 1 in 50,000 to 1 in 25,000, with a mortality rate of 3.4%.¹ Neuromuscular blockers and antibiotics are the primary trig-

gers of Type I or IgE-mediated allergic reactions, while sedatives and opioids are less common.² Propofol-induced cutaneous anaphylaxis, mediated via IgE, occurs in 1.2% of cases.² The observed limited skin lesions may be associated with non-invasive blood pressure monitoring, where an inflated cuff temporarily obstructed venous return. This case met anaphylaxis criteria with skin lesions and decreased blood pressure.³ Anaesthetists should recognise this rare reaction, reassure patients of its benign, self-limiting nature, and highlight the potential for recurrence with future propofol use.

COMPETING INTEREST:

The authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:

JCD, JZ: Contributions to the conception, design, acquisition, analysis, interpretation of data, drafting of the work, and critical revision of the manuscript for important intellectual content. Both authors approved the final version of the manuscript to be published.

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