

CLINICAL IMAGE

Blue urticaria following Patent Blue V and morphine injections

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Abstract

We present a patient with a non-IgE-mediated urticaria reaction to the morphine injection which was tinted blue due to prior injection of Patent Blue V dye into her left breast. Clinicians should be aware of these types of reaction to morphine.

KEYWORDS

direct histamine release, morphine injection, non-IgE-mediated localized reaction, Patent Blue V

1 | CLINICAL IMAGE

A 54-year-old female with a history of breast cancer received a subareolar injection of Patent Blue V dye into her left breast before wide local excision and sentinel node biopsy. On transfer to recovery, she received a further 5 mg of intravenous morphine for analgesia into a cannula sited in the dorsum of her right hand. A blood pressure cuff had been inflated around her right arm during this injection, and there was a failure to deflate the cuff before the morphine was administered. She subsequently developed blue wheals on her right arm (Figure 1) secondary to localized histamine release from the morphine. Once the reaction was observed, intramuscular adrenaline 0.5 mg, intravenous (iv) hydrocortisone 100 mg, and intravenous (iv) chlorphenamine maleate 10mg were immediately administered.

1.1 | What is your diagnosis?

Blue urticaria.

2 | DISCUSSION

Opiates are known to cause histamine release that may result in cutaneous adverse drug reactions such as urticaria,



FIGURE 1 Localized blue wheals following morphine injection on the right arm

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erythema, pruritus, and sometimes pseudoallergic anaphylactoid reactions.^{1,2} In our case, the patient experienced a non-IgE-mediated urticarial reaction to the morphine injection which was tinted blue due to prior subareolar injection of Patent Blue V dye into her left breast.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

DK and DO: did substantial contributions to conception and design, acquisition, analysis and interpretation of data, was involved in drafting the manuscript and revising it critically for important intellectual content, and gave final approval of the version to be published.

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