

Rare Presentation of dorsum Blisters in a Pediatric Patient Undergoing Vincristine Therapy for Acute Lymphoblastic Leukemia

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Introduction

As one of the oldest antineoplastic agents, vincristine is primarily used to treat hematologic malignancies. While it can lead to various cutaneous toxicities, blister formation is a rare side effect. This report describes a case involving a 10-year-old girl undergoing vincristine chemotherapy for acute lymphoblastic leukemia, who developed blisters on her hands.

Case report

A 10-year-old female patient, in complete remission from Acute Lymphoblastic Leukemia and undergoing chemotherapy with vincristine, was referred to the Dermatology Department after developing blisters on the dorsal aspects of her hands (**Figure 1**). These painful bullae appeared three hours after the intravenous administration of vincristine and were attributed to extravasation of the chemotherapy during injection. The patient was treated symptomatically by draining the bullae and applying topical

The patient was treated symptomatically by applying creams, resulting in a favorable outcome.



Figure 1: Blisters on the dorsum of the hands

Discussion

The development of blisters in this patient can be attributed to the extravasation of vincristine, which occurs when the drug leaks into the surrounding tissue rather than remaining within the vein. This event can lead to localized tissue damage and inflammatory responses, resulting in painful bullae. Extravasation is a known risk associated with many intravenous chemotherapeutic agents and necessitates immediate recognition and intervention to mitigate potential long-term complications such as necrosis or scarring [1]. The occurrence of blisters following vincristine administration underscores the importance of vigilant monitoring during chemotherapy infusions. In this case, symptomatic treatment through drainage and topical applications led to a favorable outcome, emphasizing that timely intervention can significantly improve patient comfort and recovery.

Conclusion

This case serves as a reminder of the complexities involved in administering vincristine therapy. While effective in treating malignancies like ALL, awareness of its potential cutaneous toxicities is crucial for healthcare providers. By fostering an environment of vigilance and education regarding drug administration protocols and adverse effect management, clinicians can enhance patient safety and treatment outcomes. Future studies could further elucidate the mechanisms behind vincristine-related skin toxicities and improve strategies for prevention and management.

References

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