

A Rare Case of Decitabine Extravasation

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A 70-year-old male with a known case of myelodysplastic syndrome with 5q deletion, 7% blasts, hemoglobin of 8 gm/dL, platelet count of $75 \times 10^9/L$, and absolute neutrophil count of $1.1 \times 10^9/L$ was categorized as intermediate risk with an IPSS-R score of 4.5. The patient was started on decitabine 20 mg/m^2 for 5 days every 28 days. On day 3 of the first cycle, the patient had a reddish discoloration at the cannulation site, and the drug was immediately stopped. The exact volume extravasated could not be quantified because the cannula site was detected at the time of visible discoloration, and no measurable residual subcutaneous collection was aspirated. The cannula was left in situ initially and gentle aspiration was attempted to remove any residual drug. The involved limb was elevated, and the margins of erythema were marked. No specific antidote was administered because there is no established antidote for decitabine extravasation. Local supportive care was provided with a cold compress daily for the next 3 days. The patient eventually developed necrosis on the fourth day and required debridement and plastic surgery. The image reveals marked tissue necrosis with a central area of ulceration (► **Fig. 1**). The surrounding tissue is discolored, edematous, and appears inflamed, suggestive of local tissue damage secondary to the cytotoxic effect of decitabine. Decitabine is a nucleoside analogue that inhibits DNA methyltransferases, leading to the hypomethylation of DNA and activation of tumor suppressor genes. Decitabine-induced extravasation is sparsely reported and not well characterized in the literature. When decitabine leaks into the surrounding tissue, it can cause local irritation, inflammation, and potential tissue necrosis. Extravasation injuries result from the inadvertent leakage of a vesicant or irritant drug into the surrounding tissue rather than the



Fig. 1 Dorsal and lateral views of decitabine extravasation in a case of MDS. MDS, myelodysplastic syndrome.

intended vascular system.¹ While decitabine is typically considered less vesicant compared to other cytotoxic agents, prolonged infusion or improper administration can lead to severe local complications. Management often includes immediate discontinuation of the infusion, local wound care, and potentially surgical debridement in severe cases.^{2,3} Preventive measures include careful selection of venous access sites, appropriate catheter stabilization, and patient education to promptly report any pain or discomfort at the infusion site.^{4,5}

Patient Consent

Patient consent was obtained.

Conflict of Interest

None declared.

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