Learning Objectives

1) Extravasation of antibody-cytotoxin drug conjugates including ADCT-901 can be a trigger for recall dermatitis
2) Dermatologists should recognize chemotherapy extravasation-induced recall reactions for timely coordination with oncologists and treatment with topicals

Background and Case

- Recall dermatitis induced by chemotherapy, also known as recall phenomenon, is a reaction in which patients receiving chemotherapy develop inflammatory reactions in areas affected by prior tissue injury.1,2
- A 41-year-old man with refractory Stage IV cholangiocarcinoma was enrolled to start Antibody-drug conjugate (ADCT) 901-101 through a clinical trial
- During his first ADCT 901 infusion a peripheral intravenous (IV) catheter ruptured his vein
- Five days later, he had worsening redness, tenderness, and itchiness of his arm and developed an edematous pink plaque with two ruptured bullae

Discussion

- Extravasation reactions vary in duration and extent, ranging from mild induration and pain to bullae formation and destruction of deeper structures
- Smaller veins, lymphedema, drug concentration, pH, and potential for vasoconstriction modulate reaction severity
- When our patient’s forearm rash improved with topicals and worsened in edema and tenderness after his second infusion, we suspected that the re-infusion triggered sensitized skin that had experienced prior injury.3,4
- To our knowledge, this is the first case reporting a recall phenomenon to ADCT 901, a novel monoclonal antibody-cytotoxic drug conjugate under study for recalcitrant solid tumors.5

One month later, he received his second infusion through a central line and noticed worsening pain, increasing erythema, and enlargement of his rash

- The patient then started triamcinolone 0.1% ointment to the plaque two days before each infusion and continued until the redness improved

References

5. Hartley JA, Flynn MJ, Bingham JP, et al. Pre-clinical pharmacology and mechanism of action of SG3199, the pyrrolobenzodiazepine (PBD) dimer which binds to the minor groove of DNA and produces interstrand cross-links, similar to cisplatin derivatives which are studied triggers for radiation recall. 2018/07/11 2018;8(1):10479. doi:10.1038/s41598-018-28533-4
Disclosures

Disclosures: None

All authors have no relevant disclosures