

A rare drug reaction: Toxic epidermal necrolysis following polymyxin B administration in a post-Bentall procedure

Bhavin B. Patel, Rachana B. Patel¹, Nisarg R. Hajariwala², Pankaj Maheshwari³, Anil Ganju⁴, Chetan Trivedi⁵

Abstract:

Polymyxin B is a last-resort antibiotic used to treat multidrug-resistant (MDR) Gram-negative infections. While nephrotoxicity and neurotoxicity are well-documented, severe dermatologic adverse reactions such as toxic epidermal necrolysis (TEN) are exceedingly uncommon but clinically significant. A 54-year-old hypertensive male underwent an emergency Bentall procedure for DeBakey type I aortic dissection. The patient developed acute kidney injury requiring dialysis. The patient subsequently developed polymyxin B-sensitive *Acinetobacter lwoffii* septicemia, for which intravenous polymyxin B was initiated. On day 6 of therapy, the patient developed a widespread erythematous rash that progressed to bullous eruptions and skin sloughing involving over 30% body surface area. A clinical diagnosis of TEN was made. Polymyxin B was discontinued immediately, and the patient was managed with corticosteroids and wound care. The patient demonstrated complete clinical recovery. This case underscores the importance of heightened clinical suspicion for polymyxin B-induced toxic epidermal necrolysis and early withdrawal of the offending agent to ensure prompt detection and recovery.

Keywords:

Acinetobacter lwoffii, adverse drug reaction, Bentall procedure, polymyxin B, Stevens-Johnson syndrome, toxic epidermal necrolysis