Abstract:

Purpose: Piperacillin/tazobactam is a broad-spectrum antibiotic that is widely used and commonly administered via the intravenous (i.v.) piggyback route over 0.5 to 4.0 hours. Recommendations for i.v. push (IVP) administration of piperacillin/tazobactam are lacking due to the high osmolality of the solution. The primary objective of this study was to retrospectively assess the safety and tolerability of piperacillin/tazobactam administered peripherally by IVP. Methods. A retrospective chart review was conducted to evaluate adverse drug reactions after administration of a single dose of IVP piperacillin/tazobactam through a peripheral line in an emergency department from August 2016 through November 2017.

Results: A total of 1,813 patients received 1 dose of IVP piperacillin/tazobactam during the study timeframe. Three hundred patients were randomly selected for assessment of safety and tolerability. Two hundred ninety-nine patients (99.7%) tolerated IVP piperacillin/tazobactam. One patient had an allergic reaction that included itching and hives. No infusion-related reactions were documented.

Conclusion: IVP administration of piperacillin/tazobactam through a peripheral site is safe and tolerable for adult patients.

Reference: