Abstract:

Background: Where an ongoing requirement for intravenous iron replacement exists after an index infusion reaction, current recommendations are limited to expert opinion and isolated case reports.

Objective: To evaluate the safety of recommencing an infusion or subsequent re-challenge following an infusion reaction to intravenous iron.

Methods: Infusion reactions to intravenous iron occurring between 1 January 2010 and 31 December 2019 at a metropolitan health network were identified. Patient characteristics, reaction type (mild, moderate or severe hypersensitivity, delayed, or Fishbane: transient flushing and truncal myalgias), and outcomes of recommencing the index infusion or subsequent re-challenge were examined.

Results: Among 13509 iron infusions, 195 infusion reactions occurred in 195 patients (1.4% of infusions). Recommencement of the index infusion (generally with a reduced infusion rate and pre-medication) was tolerated in 33/33 patients with Fishbane (20/20) or mild (9/9) and moderate (4/4) hypersensitivity reactions. Subsequent rechallenge (generally at standard infusion rates to an alternative formulation, ferric carboxymaltose) was successful in 68/69 patients with Fishbane (23/23), mild (26/26), moderate (16/17) and severe (3/3) hypersensitivity, or delayed (2/2) reactions. All 9 patients re-challenged to the original formulation (iron polymaltose) completed the infusion.

Conclusion: Following an infusion reaction to intravenous iron infusion, recommencement of the index infusion is safe for Fishbane or mild and moderate hypersensitivity reactions. Subsequent re-challenge to an alternative formulation is tolerated, including in severe hypersensitivity reactions (albeit based on limited numbers). Where alternative formulations are not available, re-challenge to the same formulation could be considered, depending on the risk-benefit profile.

Reference: