

## **ICODEXTRIN ASSOCIATED SEVERE CUTANEOUS TOXICITY IN A PERITONEAL DIALYSIS PATIENT.**

Syed Saghir, Suresh Kamath, John Galla, Kotagal Kant.

Division of Nephrology, University of Cincinnati, Ohio, USA.

Icodextrin (Idx) is a Peritoneal Dialysis (PD) solution, increasingly being used for the long dwell. Acute Generalized Exanthematous Pustulosis (AGEP) is a severe cutaneous manifestation, often accompanied by severe systemic symptoms.

A 54 year old black male, with ESRD, Diabetes Mellitus Type 2, on Continuous Cyclic PD for last 2 years, was switched to Idx 10 days ago, for better glycemic control. One week ago, pt noticed mild erythematous rash on his arms, which spread in next 4 days to face, trunk, and extremities. For last 2 days, pt developed increased nausea, vomiting, diarrhea, and came to Emergency Department (ED). He did not notice any changes in his PD fluid color, consistency, and had no filling or draining problems. In ED, blood pressure was 74/32, pulse 80, temperature 98.6 F. Skin examination showed confluent erythema on face, neck, trunk, all 4 extremities, with numerous scattered 1mm pustules. Axilla and inguinal fold showed desquamation. Rest of physical examination was normal. Pt was admitted, and started on fluid resuscitation and antibiotics. Laboratory data showed normal CBC, ANA, and other serology. Blood, stool and PD fluid cultures were negative. Skin Biopsy confirmed the presence of AGEP. Pt's PD solution was switched to 1.5% Dextrose. His hemodynamic condition and cutaneous manifestations improved over the next few days and he was discharged home in a stable condition.

AGEP is characterized by the sudden occurrence of hundreds of sterile, nonfollicular pinhead sized pustules arising on an edematous erythema. Fever and leucocytosis is common. Treatment is supportive, along with discontinuation of the offending agent. Idx offers the advantage of superior ultrafiltration, less carbohydrate absorption, and decreased membrane glucose exposure, compared to conventional dextrose PD solution. Major adverse reactions include peritonitis, hypertension and minor rash. Cases of Idx related minor cutaneous hypersensitivity has been reported in literature. Our pt represents an important serious debilitating adverse effect, which should be kept in mind in patients using Idx PD solution.