PP082

Esophageal eosinophilic infiltration during desensitisation treatment: a growing concern

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Objective: To describe the frequency and evolution of esophageal eosinophilic infiltration in patients with cow's milk protein allergy (CMPA) submitted to oral desensitization.

Methods: A descriptive study involving pediatric patients with CMPA submitted to desensitization protocol from 2012 to 2016. This protocol included daily intakes of increasing diluted amounts of cow milk until 120-200 ml of non-diluted milk. The mean initial dilution was $10^{-7}$ and the average time of progression from diluted milk to non-diluted milk was 3 months. Patients reported symptoms daily, and when persistent gastrointestinal symptoms occurred, endoscopy was performed. Abnormal findings (endoscopy and histology) suggestive of eosinophilic infiltration (eosinophils $\geq$15HPF) demanded appropriated treatment with proton-pump inhibitor (PPI) for 8 weeks. Swallowed topical corticosteroids (STC) was initiated if inadequate response.

Results: 19 patients were enrolled (11 F: 8 M), mean age of 10,25y at baseline. All patients had previous history of anaphylaxis and positive specific IgE to cow milk and casein. Nine patients (9/15) presented specific IgE levels to cow milk and casein higher than 100kU/L. Five patients developed gastrointestinal symptoms during treatment, all of them receiving non-diluted milk being abdominal pain the most frequent complaint, followed by vomiting and dysphagia. All patients had abnormal macroscopic findings, and increased eosinophils (mean= 20 HPF Eo). Four patients (P1, P2, P3, P4) received PPI as initial therapy, and one patient lost follow up (P5). Endoscopy was repeated and eosinophils were normal in two patients and clinical symptoms disappeared (P1, P2) but symptoms returned in one (P1). Another patient had milk excluded (P3) and P4 is waiting second endoscopy. STC was necessary in two patients with distinct evolution (P1, P3). One patient kept milk ingestion and STC (P1) and the other persisted with endoscopic abnormalities despite milk exclusion and STC treatment (P3).

Conclusion: Esophageal eosinophilic infiltration is a described complication in patients submitted to oral desensitization, but it seems more prevalent in patients with severe allergy and presents different outcomes. It is necessary continuous follow up of these patients for long periods to understand the disease and provide the best management.