

Allergy to polyethylene glycol has significant impact on daily life

Maria Bruusgaard-Mouritsen¹, Jeanne Johansen², and Lene Garvey²

¹Gentofte Hospital Skin and Allergy Department

²Copenhagen University Hospital Gentofte

July 6, 2020

Abstract

Introduction: Polyethylene glycols (PEGs) are widely used as excipients in drugs, cosmetics and household products. Immediate-type allergy to PEGs including anaphylaxis are reported with low but increasing frequency. Low awareness of the allergenic potential of PEGs among consumers, manufacturers and doctors leads to under-diagnosis and under-reporting of PEG allergy, putting patients at risk of repeated severe reactions. The aims of this study were to investigate clinical manifestations, time to diagnosis and impact of a PEG allergy diagnosis on daily life of patients. **Method:** Ten PEG allergic patients answered a questionnaire about clinical manifestations, causes and impact on daily life of a PEG allergy, scored on a likert scale (0-10) before and after diagnosis. **Results:** Eight patients had experienced at least one anaphylactic reaction requiring adrenaline treatment. Anaphylaxis was caused by depot-steroids, antibiotic/analgesic tablets, antacids and laxatives. Seven patients reported repeated reactions before diagnosis (median 3, range 2-6). Median time from first reaction to diagnosis was 20 months (range 2-120). None of the patients experienced severe allergic reactions after the diagnosis. Median likert score of the impact on daily life before diagnosis was 7 compared to 4 after diagnosis. **Conclusion:** Daily life of PEG allergic patients is improved after diagnosis. Detailed information about the allergy, an allergy warning card, education in checking labels of new products, continued follow-up and advice from the Allergy Department were reported by patients to be important. Improved awareness about PEG allergy, clear product labelling and a standardized nomenclature is needed to improve care for these patients.

Hosted file

Complete Manuscript with Tables.pdf available at <https://authorea.com/users/340035/articles/467173-allergy-to-polyethylene-glycol-has-significant-impact-on-daily-life>