



Allergic contact dermatitis to para-phenylenediamine: The experience of Liverpool Hospital Contact Allergy Clinic

Para-phenylenediamine (PPD) is a chemical used primarily as a dye and antioxidant in various industrial and consumer products. Its inclusion on the standard patch test panel reflects PPDs' standing as one of the most common compounds to cause allergic sensitisation in western countries.

Patients that are allergic to PPD typically need to make significant changes in their career or lifestyle, particularly if they are hairdressers, or wish to dye their hair. Medical advice to this cohort of patients is usually one-dimensional, and affected patients are often unhappy and non-compliant with their dermatologists' suggestions.

We examine our patient population from 2006–2012, and present their history, the mechanisms of sensitisation, and implications of PPD allergy. A review of the various dyes used in permanent, PPD-free and semipermanent hair dyes is undertaken and the safety of non-PPD hair dyes in PPD allergic individuals is discussed.

