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## Sensitivity to para-tertiary-butylphenol-formaldehyde resin in Portugal

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**Key words:** allergic contact dermatitis; para-tertiary-butylphenol-formaldehyde resin; shoe dermatitis; occupational. © Munksgaard, 1994.

Para-tertiary-butylphenol-formaldehyde resin (PTBP-F-R) improves the function of polychloroprene adhesives (1, 2). It has been reported as a contact sensitizer since 1958 (3-11).

From 1983-1992 in the Allergology Unit of the Department of Dermatology of the University Hospital of Coimbra, 3106 patients (1391 men and 1715 women) with suspected contact dermatitis were patch tested with the standard series of the Portuguese Contact Dermatitis Group, which includes the PTBP-F-R 1% pet.(Trolab).

74 positive reactions to PTBP-F-R (2.38%) were observed: 56 women (75.7%) and 18 men (24.3%), aged between 14 and 74 years (mean 43). The incidence of positive reactions varied between 1.4% (1984) and 3.8% (1992), with an increasing tendency, mainly in women (Fig. 1).

In 50 cases (67.5%), lesions were located on the feet, due to shoes, and in 3 cases on areas of contact with watchstraps (2) or leather belts (1). In 2 patients (2.7%), dermatitis was caused by glues encountered occupationally (shoe and glue industries). In 13 cases (25.7%), the cause of the positive test to PTBP-F-R was unknown.

10 patients (13.5%) had an isolated allergy to PTBP-F-R; the 64 other patients (86.5%) had multiple allergies,

mainly also to nickel sulphate (19) and potassium dichromate (16). Only 1 patient also reacted to formaldehyde.

### Comment

Sensitivity to PTBP-F-R is more frequent in Portugal (2.38%) than in other European countries (0.8-1.7%) (12-14), which may be related either to the Portuguese climate or to the use of more glues containing PTBP-F-R. Shoe dermatitis is a much commoner presentation than occupational dermatitis, probably due to the formation of allergic degradation products (1). No cases of contact depigmentation, due to free PTBP (15), were seen.

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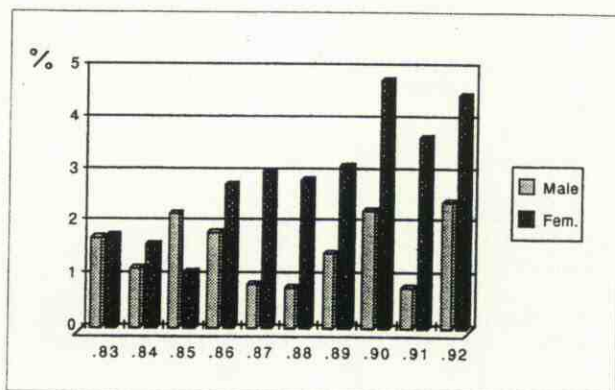


Fig. 1. Positive reactions to PTBP-F-R resin (%) in a 10-year period.

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## Allergic contact dermatitis from colour developers: absence of cross-sensitivity to para-amino compounds

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**Key words:** allergic contact dermatitis; colour developers; CD3; CD4; lack of cross-sensitivity; para-amino compounds; occupational. © Munksgaard, 1994.

### Case Report

A 23-year-old male, with no personal or family history of skin disease, had worked in a photographic developing laboratory for 2 years. He used no protection for handling developing solutions. 1 month after he started working with developers, eczematous lesions appeared in the interdigital spaces, on the backs of the hands, fingers, wrists and forearms, and on the scrotum. Patch tests with the GEIDC standard series were negative. The other patch test results are shown in Table 1.

### Comment

Allergic contact dermatitis induced by CD2, CD3 and CD4 colour developers has repeatedly been reported in those who handle them occupationally without proper protection (1-8). Although they are cross-reactive with para-phenylenediamine (PPD) derivatives, cross-sensitivity to PPD is known to be rare (1, 3, 4, 6). This case demonstrates a wider lack of cross-sensitivity to para-amino compounds.

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Table 1. Patch test results

	D2	D4
CD3 5% pet.	++	++
CD4 5% pet.	++	++
para-phenylenediamine dihydrochloride 1% pet.	-	-
black rubber mix 0.5% pet.	-	-
caine mix (cinchocaine, amethocaine, cyclomethycaine and benzocaine) 1% pet.	-	-
sulfanilamide 5% pet.	-	-
sulfamethoxazole 5% pet.	-	-
sulfadiazine as is	-	-
furosemide as is	-	-
acetazolamide 5% aq.	-	-
glibencamide 5% aq.	-	-
acetaminophen 5% aq.	-	-
sodium benzoate 5% pet.	-	-
tartrazine 2% pet.	-	-

10 control subjects patch tested were negative.

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