#### P99 Epoxy dermatitis with allergic patch test reactions from tetraethylene pentamine (TEPA)

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A male spray painter developed hand dermatitis and periocular dermatitis. On patch testing, diglycidyl ether of bisphenol A epoxy resin (DGEBA-ER) gave a 2+ allergic patch test reaction. Also Cl+Me-isothiazolinone gave an allergic patch test reaction (3+), whereas (meth)acrylates, other antimicrobials and 50 plastic and glue allergens were negative. The patient continued his work and was again remitted to us, because his hand dermatitis had worsened. He was patch tested with a series of epoxy resin compounds. Several epoxy resin hardeners gave allergic patch test reactions. Accordingly, we have an over 20-years follow-up of our patient, who developed allergic contact dermatitis (ACD) to DGEBA-ER and amine hardeners. Our epoxy resin compound series contains many amine hardeners, because no amine hardener can be used to screen for sensitivity to all amine hardeners. Our patient had allergic patch test reactions to aliphatic polyamines [diethylene triamine (DETA); triethylene tetramine (TETA); trimethylhexamethylene diamine and TEPA], to a cycloaliphatic polyamine (isophorone diamine; IPDA) and to an aromatic amine (xylylene diamine). We have not come across earlier reports on ACD from TEPA.

# P100 Occupational skin diseases increase in dental personnel

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Occupational diseases of dentists and dental nurses were compiled from the Finnish Register of Occupational Diseases. The relative risk to develop occupational allergic contact dermatitis was expressed as the age-standardized rate ratio (SRR). The majority of the occupational diseases (a total of 312 occupational diseases were reported to the Register during the 9 observation years) of dentists and dental nurses are skin diseases (n = 221; 70.8%) were registered, followed by occupational repetitive strain injuries (61 cases = 19.6%) and occupational respiratory diseases (20 cases = 6.4%). The number of allergic contact dermatoses (contact urticaria included) increased from 22 cases in 1982-1984 to 95 cases in 1992-1994, i.e. the increase was more than 300%. Irritant contact dermatitis increased from 13 cases in 1982-1984 to 23 cases in 1992-1994 (77% increase). Finnish dentists have currently the greatest risk of any occupation to develop an occupational allergic contact dermatitis, and dental nurses have the fourth greatest risk. SRR was 6.4 in dentists, i.e. the risk compared to the general working population was 6.4-fold, and 6.1-fold in dental nurses, respectively.

### P101 Contact dermatitis and sistemic reaction due to "Portuguese man of war" (Physalia . physalis)

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Physalia coelenterates, of the Hydrozoa class, normally live in the tropical areas of the Pacific, Atlantic and Indian oceans. Floating with the current, with round bodies and tentacles several meters long, they have been known to reach the Atlantic coasts of Europe and the Mediterranean. The most widespread species is Physalia physalis, the so-called "Portuguese man of war". The venom released as a result of contact with the tentacles is used to capture the small fishes that they feed on. This substance has a paralyzing effect on fish and in Man it causes intense pain, followed by the appearance of erythematous lesions, blisters and ulcers. After a few minutes, respiratory problems may arise, and may lead to respiratory arrest and cardiovascular collapse.

We refere about a young woman who spent Christmas holyday in Cuba. She suffered from a serious reaction, caused by contact with Physalia physalis (respiratory arrest and cardiovascular collapse) and she was successfully treated in Cuba during a week in Intensive Care Unit.

### P102 Five cases of contact dermatitis due to buckle after wearing jeans

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Five cases,  $19 \sim 25$  year old women, of contact dermatitis due to buckle after wearing jeans were reported. They happened from February in 1997 to January in 1998. They developed itchy eruption above or around navel. The result of metal patch test is the following; Case 1: A 19-year old woman developed positive reaction to palladium and nickel. Case 2: A 22-year old woman developed positive reaction to palladium, nickel and gold. Case 3: A 22-year old woman developed positive reaction to palladium, cobalt and nickel. Case 4: A 22-year old woman developed positive reaction to palladium and nickel. Case 5: A 25-year old woman developed positive reaction to cobalt and nickel. Their contact dermatitis cured easily after ridding them of their buckle, not touching directly their skin to buckle and applying topical steroid cream. We anticipate the same kind of cases will increase from now.

# P103 Prevention of nickel allergy by induction of immunological tolerance

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We have established a reproducible model for induction of contact hypersensitivity to nickel (Ni), using higher Ni oxidation states, i.e., Ni(III) and Ni(IV), instead of Ni(II), for priming mice. Contact hypersensitivity to Ni(II) was then assessed by