

## CONTACT ALLERGY IN ICE HOCKEY PLAYERS IN SWEDEN

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**Background:** Contact dermatitis and contact allergy among ice hockey players have been scarcely studied. Fibreglass, dyes from gloves and other factors have been suggested as the causatives to skin problems in this group. In order to more fully evaluate this issue we started a national investigation among Swedish elite ice hockey players including questionnaires, clinical examination, patch testing and intervention. 26 teams and more than 500 players participated

**Objectives:** To find out the frequency of contact allergy to patch tested substances in the 6 teams which were selected for testing among the 26 teams

**Methods:** Patch testing was performed under field conditions at the actual facility where the different teams played ice hockey. The IQ Chamber technique (Chemotechnique Diagnostics, Vellinge, Sweden) was used. 98 players were patch tested to a modified Malmo baseline series and a hockey working series, the latter containing substances representing the exposure the players had from tapes, bandages, liniments, and protective gear. In total 60 preparations were tested. The test application time was 48 hours and an experienced dermatologist made a reading of all tests after 72 hours. After another 72-120 hours a photograph was taken of the test area to enable a distant late test reading

**Results:** Contact allergy was found in 23% of the ice hockey players. The most common groups of sensitizers were emulsifiers and surfactants (lanolin, cocamidopropyl betain, lauryl glucoside), perfumes, metals (nickel, chromate, aluminium), preservatives (thimerosal, formaldehyde, methylidibromo glutaronitrile) followed by work materials and rubber components.

**Conclusion:** Perfumes such as oxidized limonene and substances related to liquid soaps and antiperspirants such as surfactants and preservatives were the most common contact sensitizers in the tested ice hockey players. The figures found in this study are higher than in our patch tested dermatitis population. This can probably be explained by frequent use of scented hygiene products when taking showers, men's perfume and perhaps remnants of soaps on wet skin facilitating sensitization in these conditions

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