

Conclusions: The intervention did not only contribute to maintenance but even to improvement of the skin condition. A decrease in hygiene measures is not to be expected in the foreseeable future. The use of the intervention concept in the context of the prevention of occupational HE among HCW seems reasonable. Skin protection and skin care recommendations of the online health education course can also be adapted for other high-risk occupations.

233

Examination of skin symptoms in painters in the shipyards

Eunseun Han¹, Seunghon Ham², Seong-Kyu Kang²

¹ Gil medical center, Department of Occupational and Environmental Medicine, Incheon, Republic Of Korea, ² College of Medicine, Gachon University, Department of Occupational and Environmental Medicine, Incheon, Republic Of Korea

Introduction: Occupational skin disease is the most common occupational disease, and various forms of disease can occur. Similar symptoms were concurrently developed in a shipyard. Then occasional physical investigation was conducted to find the cause of the occurrence of these skin symptoms.

Material and Methods: The investigation was conducted on 299 painters in the shipyard. The 1st examination was conducted through the interview of occupational health physicians. Based on this result, 35 people suspected of having newly developed skin diseases were selected. In the 2nd examination, dermatologist examined and conducted patch test. The patch test was conducted on 25 types of standard antigens and 8 types of paint samples that may cause symptoms were used.

Results: As a result of the investigation, 71 found cases of contact dermatitis, 7 hives, and 10 others. As a result of the patch test, 7 out of 10 people tested positive. 3 people tested positive for the paint, and 2 people tested positive for standard antigens. 2 out of 7 people tested positive for both paint and standard antigens. 3 people showed allergic systemic reactions instead of skin reactions in the patch test.

Conclusions: About a third of the subjects were found to have skin diseases, and various skin diseases were observed including contact dermatitis. Few people tested positive for paint samples even though clinically suspected of occupational contact dermatitis was selected. It is necessary to develop more accurate diagnostic tools to identify the cause of skin symptoms.

234

Italian health care workers and Adverse skin reactions to personal protective equipment during Covid-19 pandemic

Paolo Emilio Santoro¹, Ilaria Proietti², Ivan Borrelli³, Maria Rosaria Gualano³, Maria Francesca Rossi³, Carlotta Amantea³, Alessandra Daniele³, Concetta Potenza², Walter Ricciardi⁴, Umberto Moscato⁵

¹ Fondazione Policlinico Universitario A. Gemelli IRCCS, Department of Woman and Child Health and Public Health, Rome, Italy, ² "A. Fiorini" Hospital, Terracina (LT), Dermatology Unit "Daniele Innocenzi", Latina, Italy, ³ Università Cattolica del Sacro Cuore, Section of Occupational Medicine, Department of Health Sciences and Public Health, Rome, Italy, ⁴ Università Cattolica del Sacro Cuore, Section of Hygiene, University Department of Life Sciences and Public Health, Rome, Italy, ⁵ Università Cattolica del sacro

Cuore and Fondazione Policlinico Universitario A. Gemelli IRCCS, Section of Hygiene, University Department of Life Sciences and Public Health, Section of Hygiene and Occupational health, Rome, Italy

Introduction: During the pandemic, the use of personal protective equipment (PPE) has become essential for Healthcare Workers (HCWs) to fight safely against the virus. However, the extensive and prolonged use of PPE may cause various adverse skin reactions due to the use of alcohol hand cleanser and protracted use of masks and goggles. The aim of this study is to evaluate the skin problems caused by PPE in HCWs and the possible consequences on their work.

Materials and methods: An online ad hoc questionnaire, composed by 35 questions about sociodemographic characteristics, work related issues and exposure/habits about PPE, was administered to a sample of Italian HCWs. Univariate and multivariate analyses were performed in order to explore possible associations between variables.

Results: We tested 3 types of PPE: Gloves, Hair Bonnets and Masks for different time of utilization (<1, 1-3, 3-6, >6 hours). The sample included 1184 participants: 292 workers reported a dermatological pathology nested in four different pathological groups: 45 (15%) had Psoriasis, 54 (19%) Eczema, 38 (13%) Acne, 48 (16%), seborrheic dermatitis and 107 (36%) other. 25 workers had a loss of occupational days due to dermatological illness; 56 occupational physician surveillance visits were asked for; in 30 cases were recognized limitations in working duties.

Conclusions: Protecting HCWs requires the use of PPE, but occupational dermatitis is an emerging problem in the midst of the COVID-19 pandemic. National data for affected healthcare professionals could contribute to a better understanding of the problem and prevention initiatives in the workplace

235

Allergic and irritant-induced occupational contact dermatitis differential work-specific prevalences

Sara Alves de Matos¹, Mario Luis Silva Miranda¹, Maria Alexandra Rodrigues², Inês Lobo², António Barroso¹

¹ Centro Hospital Universitário Porto, Occupational Health Department, Porto, Portugal, ² Centro Hospital Universitário Porto, Dermatology, Porto, Portugal

Introduction: Occupational allergic contact dermatitis (OACD) diagnosis is patch-test (PT) dependent so that, if negative, left occupational irritant contact dermatitis (OICD) as an exclusion diagnosis.

Methods: Retrospective analysis (2010-2020) of 2948 CD (PT:32 allergens-EurAcadDerm-GPEDC). In addition, 4 upper-limb (ULCD) subgroups: construction (CT), hairdressing (HD), cleaning (CL), and healthcare workers (HCW) have been compared to a control group (CG) of nonspecific exposure.

Results: Of the 2948 PT nonselected patients (F/M: 2177/771), 1461 (49.6%, F/M:385/79) were PTve+. In 739 active workers (PTve+ 52.5%) out of 1586 ULCD nonselected patients, HCW (114; PTve+: 64%), CT (19; PTve+: 73.7%), HD (62; PTve+: 75.8%), CL (62; PTve+: 59.7%) and "other" (289; PTve+: 45.3%) vs CG (193; PTve+: 44.6%) we observed significant correlations ($\chi^2_{295}CI$) in CT (dichromate:86, $p<0.001$; thiurams:36, $p=0.002$; caines:25.5, $p<0.001$), HD (PPDA:16.6, $p<0.001$; N-isopropyl-N-PDA:1.1, $p=0.002$; disp orange:1.1; $p=0.001$; OH-ethylmetacrylate:18.3, $p>0.001$), CL (thiurams:13.2, $p=0.013$) and HCW (thiurams:14.5, $p=0.002$;