The partnership results in the attendance of suspicion cases of occupational dermatitis in patients evaluated in units of medical attendance for occupational diseases and dermatology.

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Introduction

• Occupational Dermatosis consists of all and any alterations to the mucous membranes, skin and its annexes that are related to professional activity or the work environment.
• It can be classified as being due to irritation or allergic in nature.
• Activities with the highest incidence: hairdressing, health services, cleaning services, civil construction, foodstuff, paint and steelmaking industries.

Methodology

• It was reviewed the 41 cases of occupational dermatitis, registered by the attendance unit for occupational diseases from January 2008 to May, 2010;
• Visit reports for two patient cases treated that was considered exemplary;
• Bibliographic review.

Results

• Total: 41 patients sent from Dermatology
• Average age of the patients: 40
• Predominant activity: Civil Construction

<table>
<thead>
<tr>
<th>Potassium Bichromate</th>
<th>Cement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy Resin</td>
<td>Glues, paints</td>
</tr>
</tbody>
</table>

Proportion of workers in the Civil Construction segment

- Civil Construction: 29.2%
- Other: 70.8%
Results

Distribution gender x age

 Male | Female
--- | ---
20-30 | 7 | 5
31-40 | 11 | 4
41-50 | 1 | 1
51-60 | 1 | 1
Over 61 | 7 | 1

Brazilian Occupation Chart (CBO) 2002

<table>
<thead>
<tr>
<th>CBO Classification</th>
<th>Description</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Service renderers, retail store/open market sales people</td>
<td>41.5</td>
</tr>
<tr>
<td>7</td>
<td>Workers in the production of manufactured goods and industrial services</td>
<td>46.3</td>
</tr>
<tr>
<td>8</td>
<td>Workers in the production of manufactured goods and industrial services</td>
<td>12.2</td>
</tr>
</tbody>
</table>

Classification of suspicion cases of Occupational Dermatoses (%)

<table>
<thead>
<tr>
<th>Condition</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allergic Contact Dermatitis</td>
<td>56.1</td>
</tr>
<tr>
<td>Irritant Contact Dermatitis</td>
<td>19.5</td>
</tr>
<tr>
<td>Non-occupational Dermatitis</td>
<td>22</td>
</tr>
<tr>
<td>Elaioconiosis</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Patch Testing

Yes | No
--- | ---
20 | 21

Results

Total
41 patients

Suspicion of contact dermatitis
31 patients

20 Patch Testings
19 positive results | 1 negative result

Results

Positive cement allergy test among civil construction workers

Allergic | Non-allergic
--- | ---
75% | 25%

05/03/2012
### Frequency of positive substances found in the contact test

<table>
<thead>
<tr>
<th>Positive Substances</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement</td>
<td>52.3%</td>
</tr>
<tr>
<td>Rubber</td>
<td>33.3%</td>
</tr>
<tr>
<td>Leather</td>
<td>19.0%</td>
</tr>
<tr>
<td>Nickel</td>
<td>14.3%</td>
</tr>
<tr>
<td>Epoxy Resin</td>
<td>9.5%</td>
</tr>
</tbody>
</table>

### Case 1

- Female, 45, handicraft worker for 20 years, with a six-months registered case of eczema initially on the back of the hands and wrists, spreading to the abdomen, thighs, and face. She works painting metal coats-of-arms.
- She worked at her own home, sitting at a workbench on which a source of heat supported the piece of metal to be painted. At the side, she would mix paint with a resin. The painting procedure was interpolated with the drying of the metal over the source of heat.
- The positive contact test for epoxy resin was considered relevant for the current skin disease.
Recommendations

• Orientation on how to work.

• Orientation on the use of protective equipment, ventilation of the workplace, rigorous hygiene.

• The patient displayed complete improvement in her lesions.

Case 2

• Male, mason for 27 years, bearing erythematic peeled skin lesions in different places: hands, wrists, forearms, feet, legs and knees.

• Contact Test was positive for Potassium Bichromate (cement).

• Employs a product composed of sand and cement and another based on Sodium Silicate, with a Ph factor of between 11 and 13, in constructing tunnels for the subway.

Recommendations

• Implementation of a Labor Accident Communication form (CAT) by the company.

• Dismiss the worker from his activities and forward the selfsame to Social Security services until full recovery of the clinical situation.

• Rehabilitation to perform other functions, so as not to expose worker to cement and rubber.

• Orientation to line gloves and boots with soft, resistant cotton fabric when eventually has to use.

Conclusion

• Occupational skin diseases can be avoided or minimized by employing strategies such as eliminating dangerous agents, adopting technical control measures such as adequate ventilation and/or strict individual protection measures such as gloves, barrier creams, worker safety education.

• Visits to the place of work and the conducting of contact tests allows, in practically all cases, the elucidation of the etiological agent of the dermatosis, which aids in the correct treatment and adoption of preventive measures.
Thank you very much!

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