

## Atypical mercury exanthema

*Contact Dermatitis 2008; 58: 110–111*

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**Key words:** baboon syndrome; contact dermatitis; exanthema; mercury.

Symmetric flexural exanthema ‘baboon syndrome’ is considered as a systemic contact dermatitis that can be triggered by various allergens (1). However, as described by Nakayama et al. (2), inhalation of mercury vapour from a thermometer in sensitive patients accounts for most instances of this condition. We report a peculiar case of mercury exanthema with its vesiculobullous clinical presentation and late onset of lesions after mercury exposure.

### Case Report

A 45-year-old man presented with itchy erythematous lesions on the upper inner surface of the thighs, for 2 days. The present proband was treated by the application of topical desonide and disinfection with povidone–iodine solution. 3 days later, the patient consulted for the rapid spreading and worsening of the lesions; he presented with diffuse erythematous, vesiculobullous lesions, symmetrically distributed over the

buttocks and a genital area, rapidly spreading to the inferior part of the trunk and the upper extremities. The temperature was 37.5° celsius. A complete blood count showed elevated eosinophilia with no increase in leucocytes count. A skin biopsy showed focal spongiosis, and some vesicles were optically empty. The dermis showed infiltration with lymphocytes, histiocytes, and numerous eosinophils. The present proband reported manipulation of a broken thermometer 3 weeks ago. He also reported the appearance of a contact dermatitis, several years ago (for about 10 years), after application of mercurochrome solution. Serum and urine mercury levels were both increased: 56 nmol/l (normal <25) and 15 nmol/l (normal <3) respectively. A remission was observed with a short period of oral corticosteroids. 2 months after complete resolution, the patient was patch tested with European standard series, metals series, and povidone-iodine [10% aqua (aq.)]. Reactions were evaluated at D2 and D3 according to ICDRG guidelines. The results are summarized in Table 1. A repeated open application test performed with povidone-iodine was negative.

### Discussion

Due to clinical, histological, laboratory and patch test findings, the diagnosis of mercury exanthema was made in our patient. Our present proband expressed his baboon syndrome 3 weeks after exposure to mercury. To the best of our knowledge, this latency is the longest ever reported in literature. Previous published cases showed a latency varying from few hours to few days (maximum was 10 days) (3). Jelen (4) reported a 2-week latency but with unknown previous mercury exposure. Although mercury

exposure occurred 3 weeks ago, serum and urine mercury levels were both increased. This could be explained by the longer duration of the half-time elimination of mercury (for about 58 days) (5). It is known that interaction between mercury and iodine forms iodine of mercury, which is harmful to the skin and can lead to cutaneous necrosis (6). This could explain the rapid worsening of the lesions and the appearance of the vesiculobullous lesions in our patient.

### References

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Table 1. Results of patch tests

| Allergen                             | D2 | D3 |
|--------------------------------------|----|----|
| Metallic mercury<br>0.5% pet.        | ++ | ++ |
| Phenylmercuric<br>acetate 0.01% aq.  | +  | ++ |
| Mercury ammonium<br>chloride 1% pet. | ++ | ++ |
| Thimerosal 0.1% pet.                 | ++ | ++ |
| Amalgam 1% pet.                      | —  | —  |
| Povidone-iodine<br>10% aq.           | —  | —  |

aq., aqua.