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CUTANEOUS ALLERGIC REACTIONS TO RED DYE IN TATTOOS: REPORT OF THREE CASES

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Aim: To present three cases of cutaneous allergic reactions to red dye in a tattoo and to emphasise the different clinical and histologic presentations of allergic reactions to tattoos.

Methods: Case reports and review of the literature.

Results: Patient A, a 50-year old woman, developed a painful ulceration of a tattoo on the lateral right ankle. She also complained of a sudden onset of pain in a red tattoo placed on her left hip 30 years ago. The ulceration on the right ankle was restricted to the red dye (*figure 1*). Wound cultures revealed a pseudomonas aeruginosa infection. Histology showed chronic inflammation and fibrosis. Treatment consisted of compression bandaging, adequate wound care and analgesia.

Patient B, a 57-year old woman, complained of swelling since 5 months in the red part of a tattoo placed 8 weeks before. On physical examination swelling, erythema and squamae were observed (*figure 2*). Histopathological evaluation revealed a pseudolymphomatous reaction. The patient was treated with intralesional corticosteroids.

Patient C, a 23-year old woman, developed a chronic itch and swelling of the red part in a tattoo on her right lower leg, placed 2 months before (*figure 3*). Histology showed a chronic, partly granulomatous, inflammation. The patient was treated with topical corticosteroids.

Tattoos are a popular form of body art in The Netherlands. Over the past decades, changes have been made in the composition of coloured tattoo ink, which used to be composed of inorganic pigments containing heavy metals such as mercury or mercuric sulphide. Currently inks mainly contain azo or polycyclic pigments.

Conclusion: Clinical and pathological classification of tattoo reactions remains challenging because of the great variety in clinical appearance and histological patterns. In spite of changes to the compounds in tattoo inks, allergic reactions are still mostly observed to red ink.

NB: Figures are not included in the programme and abstract book but can be seen on the poster