

Tigecycline Induced Hyperpigmentation of the Skin

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A 65-year old patient developed a sacral decubitus ulcer with osteomyelitis after a jaw reconstruction for osteonecrosis of the jaw. (Figure 1B illustrates the skin color just before start of tigecycline treatment). Based on cultures, the unfavourable evolution of the wounds, and her β -lactam allergy, tigecycline was given for a total of 102 days. After 2.5 months of treatment, a progressive brown-gray hyperpigmentation of the skin of the trunk and upper arms was noticed (Figure 1A), similar to the hyperpigmentation observed after prolonged minocycline use. A skin biopsy demonstrated accumulation of melanin and iron laden macrophages in the upper dermis. The correlation between prolonged minocycline use and skin discoloration has been well established [1]. The patient did not take other medication correlated with skin discoloration. Her medications were bumetanide, amlodipine, bisoprolol, percutaneous fentanyl, pantoprazole, sodium bicarbonate, amitriptyline, lorazepam, paracetamol, and low-dose nadroparin. Because tigecycline is 9-(*N,N*-dimethylglycylamido) derivate of minocycline, the discoloration observed in this patient was very likely caused by tigecycline [1]. Tigecycline was stopped in the patient, but she died 2 weeks later due to severe sepsis.

Drug-induced skin hyperpigmentation is caused by drug-induced increases in melanin production and/or by accumulation

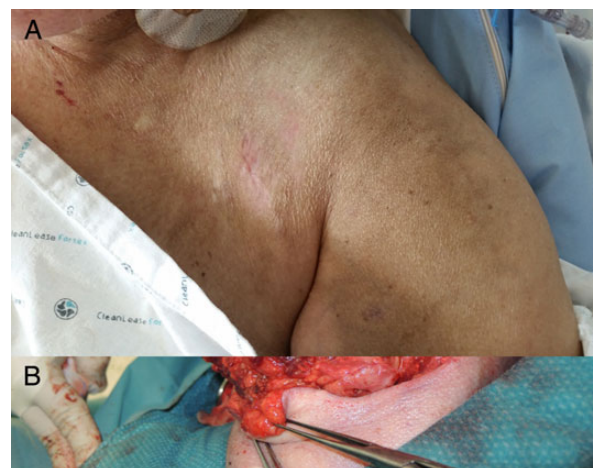


Figure 1. Skin of the patient after 2.5 months of treatment with tigecycline (1A) and just before starting of the tigecycline treatment (1B).

of drug complexes or metals in the skin [1]. Classic triggers are chemotherapeutics (eg, bleomycin, 5-fluorouracil, methotrexate), oral contraceptives, heavy metals (iron, lead, silver, gold), and miscellaneous drugs such as amiodarone, chloroquine, diltiazem, minocycline, and newly described tigecycline [1]. The treatment of minocycline-induced skin discoloration consists of interruption of the offending drug and avoidance of sun exposure [1]. Similar to many undiagnosed conditions, increased awareness of their existence is the key to diagnosis.

Reference

1. Krause W. Drug-induced hyperpigmentation: a systematic review. *J Dtsch Dermatol Ges* 2013; 11:644–51.

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