

## CLINICAL IMAGES

## Bier spots

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**A** 53-year-old man presented to our out-patient department after a two-month history of asymptomatic skin lesions on his forearms and upper thighs. He had no history of vascular disease or a family history of such lesions. Physical examination showed numerous white macules with irregular borders against a background of blanching erythema on the patient's forearms and upper thighs when his arms were in the dependent position (Figure 1A). The lesions disappeared when the limbs were raised (Figure 1B). Routine laboratory tests yielded normal results. Results of tests for anti-nuclear antibody, antiphospholipid antibody, cryoglobulin, and proteins C and S were negative. Considering the characteristic manifestations, idiopathic Bier spots were diagnosed. The patient did not undergo treatment.

Bier spots were originally described in 1898 by Bier<sup>1</sup> and are also called physiologic anemic macules, angiospastic macules and exaggerated physiologic speckled mottling of the skin.<sup>2</sup> The condition is usually seen in people 20 to 40 years old and is more common in women than men.<sup>2</sup> Clinically, the lesions appear as transient, small white macules with surrounding blanching erythema when the patient is standing, and they disappear after the limbs are raised. These macules are considered a physiologic response of small cutaneous vessels to venous hypertension.<sup>1</sup> Vasoconstriction of small vessels leading to tissue hypoxia is another possible mechanism.<sup>1</sup> Although Bier spots usually have a physiologic cause, they are sometimes the first sign of systemic diseases such as scleroderma renal crisis, mixed cryoglobulinemia and lymphoma.<sup>1,3</sup>

Idiopathic Bier spots can be diagnosed easily through physical examination. However, clinicians need to differentiate the disease from other disorders in which white macules are observed, such as vitiligo, postinflammatory hypopigmentation, pityriasis versicolor, pityriasis alba and nevus anemicus.<sup>2</sup> In idiopathic cases, no specific treatment is required because the lesions are usually asymptomatic and resolve spontaneously.<sup>2</sup>



**Figure 1: (A)** White macules against a background of erythema on a 53-year-old man's forearm in the dependent position. **(B)** The lesions disappeared after the patient raised his arms.

## References

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