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## Prayer Mark on the Forehead: Hyperpigmentation

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Dear Editor:

Muslims develop prayer marks on the skin due to the practice of praying for long periods<sup>1</sup>. Sharma et al.<sup>2</sup> also called them the Naamaj sign. In the Muslim religion, praying requires four different positions, namely Waqūf (standing), Ruku (bowing), Sajda (prostration), and Julus (sitting). The resulting prayer marks are mainly distributed on the forehead, elbows, knees, and ankles (Fig. 1A)<sup>3</sup>. In one reported case, the mark was on the nasal bridge<sup>4</sup>. During Sajda, the forehead repeatedly comes into contact with the ground (especially with the prayer rug). These repeated and long periods of friction leads to skin changes such as thickening, hyperpigmentation, and lichenification<sup>1-4</sup>.

A 75-year-old man presented to our clinic with a 7-year history of vitiligo. His dermatological examination revealed multiple depigmented macules on the scalp. Also, a hyperpigmented macula was seen on the middle of the forehead and on both knees (Fig. 1B). The patient's history revealed

that he has been praying 5 times a day for 50 years and that he developed the lesions 10 years ago.

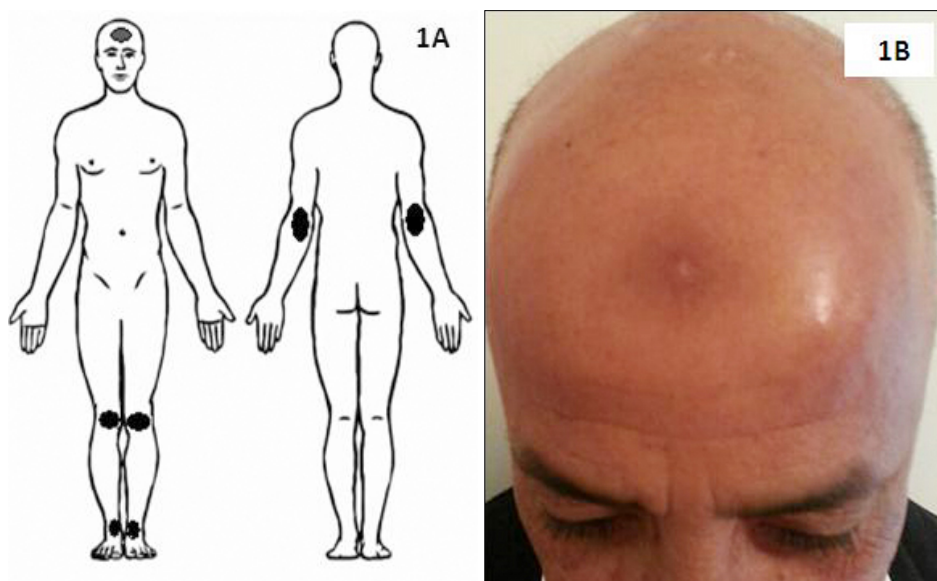
In the study by Abanmi et al.<sup>1</sup> in 349 Muslims, prayer marks were noted to be more common in men than in women. Hyperpigmentation of the forehead was more frequent in men, and lichenification of the forehead was seen in only one man in their study. In this study, the common histological findings of the lesions were orthokeratosis, hypergranulosis, and dermal papillary fibrosis. In some cases, increased dermal capillaries lined with endothelial cells and cytoplasmic pigmentation were seen. Other reported histological changes were basal cell hyperpigmentation, hyperkeratosis, and acanthosis.

Cangiano et al.<sup>3</sup> published a case report in which prayer marks were associated with the worsening of an underlying chronic disease. Sharma et al.<sup>2</sup> also reported a case in which prayer marks appeared 2 months before an acute myocardial infarction. At the time of presentation, our patient did not

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**Fig. 1.** (A) Main distributions of the prayer marks. (B) Prayer mark. A hyperpigmented macule on the middle of the forehead.

have any systemic disease. Nevertheless, he was informed that worsening of the hyperpigmented lesions can be a warning sign of a systemic disease.

Skin changes such as hyperpigmentation may have an etiology based on religious behaviors. It is important to have a detailed history and to consider the habits of the patient.

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