

## Dermoscopy of keratosis follicularis squamosa

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### Abstract

Although the characteristic clinical appearance and the differences in distribution, it is often difficult to differentiate keratosis follicularis squamosa (Dohi) from other keratotic disorders. Here, we describe the case of a 5-year-old boy with Dohi in the first time that by using dermoscopy. Dermoscopy of the lesion showed typical *lotus leaves on the water* appearance and follicular plug in the center. We reported the usefulness of dermoscopy in Dohi.

### Introduction

Although the characteristic clinical appearance and the differences in distribution, it is often difficult to differentiate keratosis follicularis squamosa (Dohi) from other keratotic disorders. Here we reported in the first time that by using dermoscopy, atypical clinical appearance in Dohi became more obvious.

### Case Report

A 5-year-old Japanese boy presented with a 1-year history of asymptomatic scaly eruptions symmetrically scattered on the trunk and thighs (Figure 1A). His medical history was unremarkable and he had no history of atopic dermatitis. There was no family history of a similar disease. Physical examination revealed small scattered patches whose margin is slightly detached from the underlying epidermis, but a typical brown-coloured follicular plug in the center was not obvious (Figure 1B). However, dermoscopic observation without echo-jelly remarkably showed typical *lotus leaves on the water* appearance (Figure 2A). Moreover with echo-jelly, even though *lotus leaves on the water* appearance cannot observe, a typical brown-coloured follicular plug in the center and fatty hair which has larger diameter than normal area

became obvious by dermoscopy (Figure 2B). Histopathology showed dilated follicles with keratotic plugs and orthohyperkeratosis (Figure 2C). Treatment with 20% uric acid containing cream led to clinical disappearance of the lamellar scaling improved.

### Discussion

Dohi, characterized by 10±3 mm diameter scaly patches scattered on the trunk, is a keratinizing disorder first described by Dohi and Momose in 1903.<sup>1</sup> Its asymptomatic scaly patches with a margin that is slightly raised from the underlying epidermis was originally described as *lotus leaves on the water*. A tiny pigmented papule is present in the center of the lesion. This is histopathologically a dilated hair follicle with a follicular plug surrounded by lamellar orthohyperkeratosis. Dohi is, thus, well recognized in Japan as a separate clinical entity from keratosis follicularis (Darier's disease).<sup>2</sup> But it often diffi-



Figure 1. Clinical features of a patient with keratosis follicularis squamosa. A) Brown follicular papules surrounded by thin lamellar scales on the trunk. B) Typical *lotus leaves on the water* appearance are seen, but a typical brown-coloured follicular plug in the center was not obvious.

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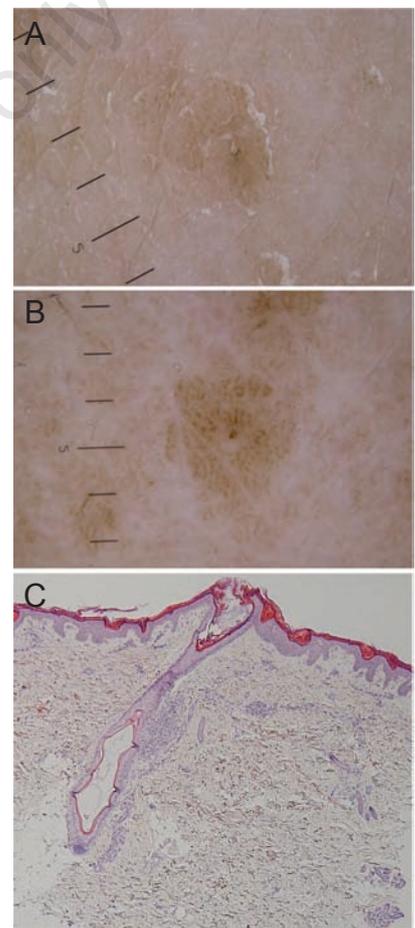


Figure 2. Dermoscopic observation of the lesion. A) Observation without echo-jelly remarkably represent typical *lotus leaves on the water* appearance. B) Observation with echo-jelly showed a typical brown-coloured follicular plug in the center and delicate pigment network around it. C) Pathological findings of the lesion. A dilated hair follicle with keratotic plugging and surrounding epidermis with orthohyperkeratosis (haematoxylin and eosin, original magnification x100).

cult to differentiate keratosis follicularis squamosa (Dohi) from other keratotic disorders when the characteristic feature of cutaneous findings are not obvious. Here we reported the usefulness of dermoscopy in Dohi.

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