Dermatology Practical & Conceptual

Pigmented Purpura of Doucas and Kapetanakis in Pediatric Patients: A Rare Report of Six Cases

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Key words: Doucas And Kapetanakis Purpura, Pigmented Purpuric Dermatosis, Pediatric Dermatology, Lichenoid Vasculitis, Eczematoid Pigmented Purpura

Citation: Nowowiejska-Purpurowicz J, Piccolo V, Van Gysel D, Grimalt R, Cutrone M. Pigmented purpura of Doucas and Kapetanakis in pediatric patients: a rare report of six cases. *Dermatol Pract Concept*. 2026;16(3):6241. DOI: https://doi.org/10.5826/dpc.1603a6241

Accepted: August 28, 2025; **Published:** July 2026

Funding: None.

Competing Interests: None.

Authorship: All authors have contributed significantly to this publication.

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Introduction

Pigmented purpuric dermatoses (PPDs) encompass a spectrum of vascular dermatoses characterized by non-blanching, petechial to brownish macules due to capillaritis and hemosiderin deposition [1]. Doucas and Kapetanakis first described an eczematoid variant in 1953, marked by spongiotic and lichenoid histological features, and a purpuric, eczematous clinical presentation [2]. Though typically observed in adults, reports in children are exceedingly rare. We describe 6 pediatric cases of Doucas and Kapetanakis purpura with emphasis on clinical presentation, dermoscopy, and management.

Case Reports

We collected 6 cases of eczematoid purpura in children (summary presented in table 1.), 3 in girls and 3 in boys. The majority were teenagers; however, the youngest child was 16 months old. All subjects reported pruritus of various severity. Physical examination revealed similar clinical manifestation in all patients: solitary or multiple symmetrically distributed, non-blanching, erythematous to brownish macules and petechiae. Some lesions showed slight scaling. The localization was: lower legs in 2 cases, a buttock in 1 case, an ankle in 1 case, an extensor surface of a foot in 1 case, and a flexor surface of a forearm in 1 case. There was no

Table 1. The summary of children diagnosed with eczematoid purpura.

Patient	Gender, age	Duration	Treatment	Resolution
1 (fig. 1A, F)	Male, 12 years old	3 months	Topical steroids	Fading after 6 weeks
2 (fig. 1B)	Female, 13 years old	1 month	None	Resolution after 1 year
3 (fig. 1G)	Male, 12 years old	3 months	Topical steroid	Gradual improvement after 2 months
4 (fig. 1C)	Female, 7 years old	3 months	Topical steroid	Resolution after 6 months
5 (fig. 1D, H)	Female 16 months old	3 month	Topical steroid	Resolution after 1 year
6 (fig. 1E, I)	Male, 14 years old	6 months	Topical steroid, oral vitamin C (1g), oral flavonoids	Still present after 1 year

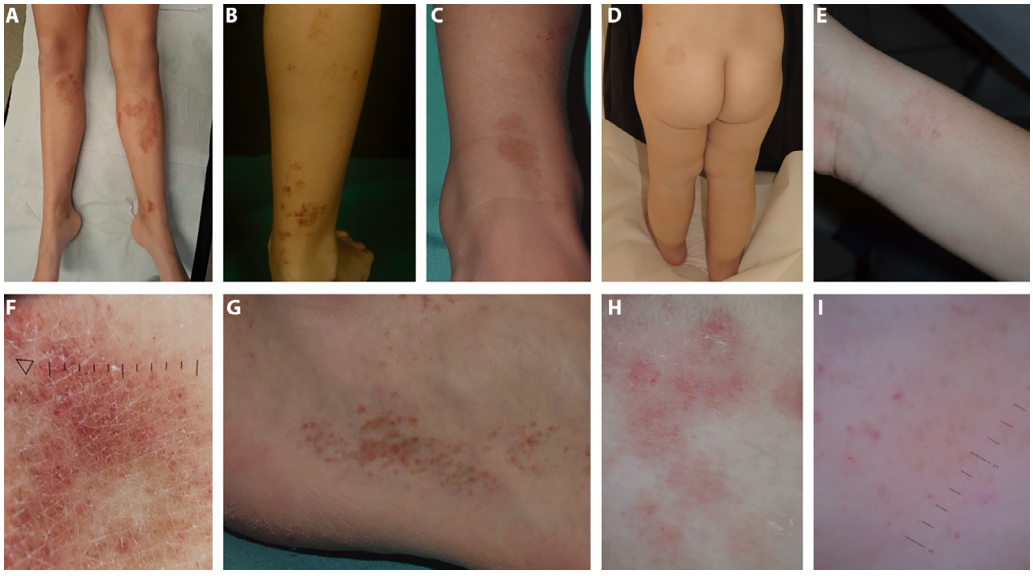

Figure 1. The clinical and dermoscopic pictures of eczematoid purpura in the described children. A, B, C, D, E, G – clinical presentation of lesions patients: solitary or multiple non-blanching, erythematous to brownish macules and petechiae. F, H, I – dermoscopic pictures of lesions in patients – numerous red or brownish or deep pink globules located on light pink background.

palpable purpura or lymphadenopathy. In all cases, the diagnosis was made clinically, and in half of them, the biopsy was performed to confirm the diagnosis of eczematoid purpura. In the majority of cases (5/6), topical steroids were applied resulting in almost complete or total resolution of lesions. In only one case, despite the treatment, lesions persisted after one year.

Discussion

Doucas and Kapetanakis purpura is one of the less common variants of PPD and is characterized histologically by spongiosis, interface changes, extravasation of erythrocytes, hemosiderin-laden macrophages, and a perivascular lymphocytic infiltrate. While the exact etiology is unknown, it is hypothesized to involve capillary fragility, cell-mediated immune response, and environmental triggers [1]. In children, PPDs are rarely reported [3] and can be misdiagnosed as vasculitis or thrombocytopenic purpura. Importantly, PPDs are benign and not associated with systemic involvement or coagulopathies. Management is usually supportive, focusing on skin care and avoidance of exacerbating factors. Topical corticosteroids may provide some improvement in inflammation and discoloration [1].

Although rare, pigmented purpura of Doucas and Kapetanakis can occur in children and should be considered in the differential diagnosis of chronic petechial dermatoses. Awareness of its clinical and histological features can prevent unnecessary investigations and ensure appropriate management.

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