K. Hussain[1] **and N. P. Patel**[1]
[1]*Department of Dermatology, Charing Cross Hospital, Imperial College Healthcare NHS Trust, London, UK*
E-mail: khawar.hussain1@nhs.net
Conflict of interest: the authors declare that they have no conflicts of interest.
Accepted for publication 19 August 2020

References

1 Levin YS, Warshaw EM. Teledermatology: a review of reliability and accuracy of diagnosis and management. *Dermatol Clin* 2009; **27**: 163–76.
2 Sood S, Mbarika V, Jugoo S *et al*. What is telemedicine? A collection of 104 peer-reviewed perspectives and theoretical underpinnings. *Telemed J E Health* 2007; **13**: 573–90.
3 Eedy D. Dermatology: a specialty in crisis. *Clin Med (Lond)* 2016; **16**: 61; erratum 2015; 15: 509–10.
4 British Association of Dermatologists. Position statement on teledermatology. Available at: https://www.bad.org.uk/shared/get-file.ashx?itemtype=document&id=6414 (accessed 25 June 2020).
5 Joint Royal College of Physicians Training Board. Curriculum for dermatology training. Available at: https://www.jrcptb.org.uk/sites/default/files/Dermatology%20curriculum%2023.3.20.pdf (accessed 29 July 2020).

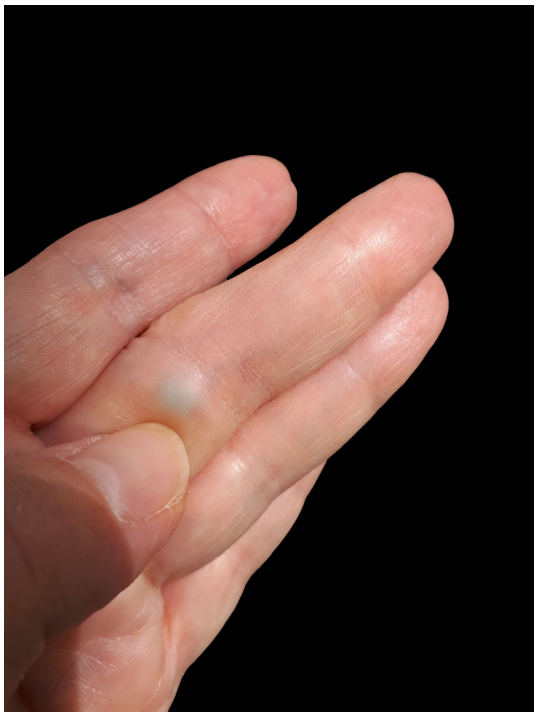

Figure 1 A small, soft, nontender, subcutaneous blue nodule, 5 mm in size, on the left third palmar digit in a patient with COVID-19.

Palmar digital vein thrombosis in a patient with COVID-19

doi: 10.1111/ced.14442

A 53-year-old woman presented with a 3-week history of intermittent blue nodules on the palmar digits of her hands, coincident with COVID-19 infection. The patient carried the factor V Leiden mutation. She had a strong family history but no personal history of venous thromboembolism. She had not undertaken any strenuous or heavy manual labour prior to the onset of the nodules.

On physical examination, a soft, nontender subcutaneous blue nodule, 5 mm in size, was seen near the proximal interphalangeal joint (PIPJ) on the palmar aspect of the left third digit (Fig. 1). Full physical inspection of the skin revealed no other similar cutaneous manifestations. The patient was diagnosed with palmar digital vein thrombosis.

Thrombosis of the palmar digital veins causing cutaneous nodules is rare. Digital vein thrombosis was first described in 1936 by Jadassohn.[1] In the few cases reported, patients were generally women, with an age range of 35–65 years. The nodules are commonly described on the palmar aspect of the digits and found at or near the level of the PIPJ, but they can also be located over the middle or distal interphalangeal joint. The condition appears to have a predominance for the fourth digit but it does not discriminate between dominant and nondominant hands. Pain, tenderness, erythema and warmth are features that are suggestive of this diagnosis.[2]

There are four functional systems draining blood from the digits: the arborizing veins, venous arch, and the deep and superficial axial veins. Thrombosis is more commonly reported in the superficial axial veins, particularly the palmar veins, which are small in diameter and contain more valves. The role of hypercoagulable states in digital vein thrombosis is poorly understood and has not been formally investigated. Lechner *et al*. described a patient who developed deep vein thrombosis of the legs with recurrent lung emboli, which were preceded by digital vein thrombosis.[3] In 2002, Hofer described an isolated case of antiphospholipid syndrome causing digital vein thrombosis.[4]

The diagnosis of palmar digital vein thrombosis is based mainly on clinical symptoms although noninvasive assessment by ultrasonography can be undertaken. The mainstay of treatment is conservative therapy, including massage and compression. Surgical removal can be considered if the condition is painful or progressive.

The marked inflammation triggered by COVID-19 infection results in coagulopathy and endothelial dysfunction.

The ensuing hypercoagulable state, termed 'thromboinflammation', can manifest as thrombosis in both large and small blood vessels.[5] We hypothesize that the hypercoagulability induced by COVID-19, combined with the patient's known thrombophilia, resulted in digital vein thrombosis.

To our knowledge, this is the first description of digital vein thrombosis in a patient with COVID-19, adding to the wide spectrum of thrombotic manifestations found in this illness. The patient was treated conservatively and had a good outcome.

A. Connolly,[1] S. Walsh[1] and R. Arya[2]
Departments of [1]Dermatology and [2]Thrombosis and Haematology, King's College Hospital NHS Foundation Trust, King's College Hospital, London, UK
E-mail: aveen.connolly@nhs.net
Conflict of interest: the authors declare that they have no conflicts of interest.
Accepted for publication 31 August 2020

References

1 Jadassohn W. Ein fall von thrombosen in den fingervenen. *Schweiz Med Wochenschr* 1936; **66**: 549.
2 Lanzetta M, Morrison WA. Spontaneous thrombosis of palmar digital veins. *J Hand Surg B* 1996; **2**: 410–12.
3 Lechner W, Metz J, Viehweger G. [Palmar and digital varicosis – recurrent thrombophlebitides (author's transl)] (in German). *Dermatologica* 1979; **158**: 361–7.
4 Hofer T. Palmar digital vein thromboses: their different expressions. *Dermatology* 2002; **204**: 240–3.
5 Connors JM, Levy JH. COVID-19 and its implications for thrombosis and anticoagulation. *Blood* 2020; **135**: 2033–40.

Dermoscopic features of acquired perforating dermatosis: a retrospective analysis of 19 cases

doi: 10.1111/ced.14444

The term 'acquired perforating dermatosis' (APD) covers a group of transepidermal elimination disorders. The clinical picture is characterized by the presence of multiple pruritic, keratotic, follicular/nonfollicular papules and nodules, commonly over the extremities and trunk.[1] The dermoscopic features of APD are sparsely reported in the literature.[2,3] We aimed to study the various dermoscopic features of APD.

The study was approved by the institutional ethics committee. Informed consent was waived as the study was retrospective.

This retrospective, descriptive study was conducted in a tertiary care hospital in south India. Only biopsy-proven cases of APD, seen between January 2014 and December 2016, were included in the study. The clinicodemographic data and clinical and dermoscopic images were retrieved for all the patients. The dermoscopic images had been taken using a nonpolarized contact dermatoscope and attached SLR camera (Nikon, Tokyo, Japan).

Table 1 Dermoscopic features observed in acquired perforating dermatosis.

Dermoscopic feature	Lesions, *n* (%)
Global pattern	
Three-zone concentric pattern	112 (91.8)
Two-zone concentric pattern	10 (8.1)
Local feature	
Central keratotic plug	122 (100)
Central white homogeneous area ('white-collar sign')	112 (91.8)
Peripheral hyperpigmentation	115 (94.3)
Altered hair shaft	32 (26.2)
> 1 keratotic plug per crater	10 (8.19)
Variable shaped keratotic plug	42 (34.4)
Peripheral pigment network	49 (40.2)
Peppering (granularity)	51 (41.8)
Peripheral erythematous zone	24 (19.7)
Peripheral ridge and groove pattern	36 (29.5)
Peripheral striation	5 (4.1)
Pigment network-like area	8 (6.5)
Vessels	
Haemorrhage	17 (13.9)
Focal red/purple dots/globules	28 (22.9)
Peripheral hairpin vessels	26 (21.3)
Peripheral glomerular vessels	8 (6.5)
Arborizing vessels	1 (0.8)

Nineteen patients (16 men, 3 women) with APD, having a total of 122 lesions, were included in the analysis. Mean age at the initial presentation was 49.05 years (range 24–76) and mean lesion duration was 4.1 months (range 2–10). Lesions were distributed over the extremities, trunk and buttocks. All but one case had associated underlying disease; diabetes mellitus alone ($n = 8$), chronic kidney disease (6), chronic kidney disease with diabetes mellitus (2), alcoholic liver disease (1) and zinc deficiency (1).

The detailed dermoscopic features are shown in Table 1. A three-zone concentric pattern (a central keratotic plug, middle white homogeneous area and outer zone of hyperpigmentation), was observed in 112 (91.8%) of the 122 lesions (Fig. 1), while a two-zone concentric pattern (Fig. 2) was observed in the remaining 10 (8.1%). A central keratotic plug was present in all the patients (100%), the shape of which varied widely from round to angulated, with colours varying from shades of yellow and brown to black. A white homogeneous area around the central keratotic plug was observed in 91.8% of the lesions, which we term the 'white-collar sign', as it surrounded the central keratotic plug like a collar. Hair-shaft abnormalities such as thin and broken hair shafts were observed in follicular keratotic papules. A grey to brown peripheral homogeneous pigmentation was noted in 94.3% lesions.

