Isolated Palmar Lichen Nitidus—
A Diagnostic Challenge: First Case from Eastern India

Indrashis Podder, Swosti Mohanty, Somodyuti Chandra, Ramesh Chandra Gharami

Sir,
Lichen nitidus (LN) is a relatively uncommon chronic inflammatory disease, characterized by minute (1-2 mm), shiny, flat-topped, exquisitely discreet, pale to skin-colored papules, most commonly distributed over the penis, lower abdomen, inner surface of the thighs, dorsal hands/forearms, buttocks etc.\(^1\) Rarely, they may present on the palms, soles, nail and mucosa,\(^2\) where this characteristic morphology is missing, thus posing a diagnostic problem. However, typical LN lesions are usually present elsewhere to aid in the diagnosis. We present here the first case of isolated palmar LN from Eastern India, which was confirmed by histopathology.

An otherwise healthy seven and half-year-old boy presented to us with multiple firm to hard, well-circumscribed, occasionally itchy, small pin-head sized swellings involving only his palms for the last 3 years [Figure 1]. There was no history of trauma. Past history and family history were non-contributory. Dermatological examination revealed each hyperkeratotic papule to have a prominent, central pit containing keratin plug with a thick surrounding ridge; sized about 1.5 to 2 mm. The lesions were non-tender and non-purpuric in nature. Remaining cutaneous examinations including nail, hair and mucosa were non-contributory. All routine biochemical investigations were within normal limits. A skin biopsy from one of the lesions demonstrated epidermal hyperkeratosis, parakeratosis along with dense lymphohistiocytic infiltrate in the papillary dermis. Acanthotic rete ridges surrounded the papillary dermal infiltrate, giving rise to the characteristic “claw clutching a ball” pattern [Figure 2]. Histopathological examination (HPE) was consistent with the diagnosis of palmar LN. Emollients, antihistamines and topical clobetasol propionate ointment twice daily were prescribed. After 2 months, the patient did not show much improvement except the relief from pruritus; topical salicylic acid is our next option; systemic retinoid therapy may be contemplated if the patient remains un-responsive, as the last resort.

Very few cases of palmar LN have been reported in the literature, which present as hyperkeratotic pitted papules and plaques on the palms,\(^3\) thus posing diagnostic difficulty. However, it has been observed that palmar LN is usually associated with characteristic lesions of the more typical sites viz. the trunk and extremities, so that the diagnosis of LN becomes easier.\(^4,5\) Also, palmar LN is frequently associated with plantar lesions.\(^6\) However, in our case, only isolated palmar involvement was seen thus adding to the diagnostic confusion. There are very few reports of isolated palmer LN,\(^4,6,7\) and our case...
Correspondence

appears to be one of them; the first one from Eastern India.

Most of the previously reported cases of palmar LN have shown the mean age of onset around the fifth decade (age range 37~52);[2] however, our patient presented with palmer LN in the first decade (age seven-and-half years). LN is usually asymptomatic; however, it can also be pruritic at times. Our patient also complained of occasional pruritus.

Palmar lesions of LN may resemble perforating lichen planus (hyperkeratotic, hyperpigmented plaques); HPE shows classical features of lichen planus (band like lymphocytic dermal infiltrate, basal layer degeneration, etc.), acrosyringeal lichen planus (slightly scaly patch with pits) and lymphocytic infiltration surrounding the dilated acrosyringium, along with a parakeratotic plug), pompholyx (presence of itchy vesicles), hyperkeratotic fissured eczema (severe pruritus, excessive fissuring), pitted keratolysis (shallow, multiple pits) and porokeratotic eccrine ostial and dermal duct nevus (occurs exclusively in adults). Darier’s disease and nevoid basal cell carcinoma may also present with pitted papules and plaques, but these lesions are skin colored to yellowish and other cutaneous manifestations of the disease are present. Typical clinical picture and HPE appearance showing “claw clutching a ball” pattern[1] clinched our diagnosis as LN.

Because LN is asymptomatic, treatment is usually not necessary; however, topical high or super potent corticosteroid, topical calcineurin inhibitors, NBUVB, PUVA[1] or oral astemizole[2] have been found to be effective. Palmar LN, showing a chronic course, is usually refractory to these conventional treatments. Anecdotal reports have shown the benefit of oral retinoids[1] and oral cyclosporine[8] in the treatment of such resistant cases. Our patient did not show much improvement after 2 months of conventional therapy, oral retinoid therapy has been planned if the patient remains resistant.

This case has been reported so that we keep this diagnosis (palmar LN) in mind, whenever we encounter palmar hyperkeratotic lesions, irrespective of the presence of similar lesions elsewhere in the body.

References