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Pincer nail deformity of all 20 nails associated with systemic lupus erythematosus and lupus nephritis

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Introduction: Systemic lupus erythematosus (SLE) is an autoimmune disorder associated with several systemic and cutaneous clinical manifestations. Nail abnormalities are present in 31% of the patients with SLE. Pincer nail deformity is the transverse overcurvature of the nail plate, the association with SLE is a rare phenomenon and only a few cases have been reported to date. We present a case of 20 nails pincer deformity associated with SLE and lupus nephritis.

Clinical case: A 16-year-old female patient with a medical history of SLE presented to our dermatology department complaining about a 6-month history of nonpainful nail deformities. Before her consultation the patient had been hospitalized because of lupus glomerulonephritis. Upon interrogation she referred taking not specified over-the-counter treatments without improvement. She denied any discharge associated from the affected nails. Physical examination revealed pincer deformity of all 20 nails. Mycologic tests (potassium hydroxide direct test and cultures) were negative and radiography of each extremity did not show bone involvement. Topical 40% urea under occlusion was prescribed.

Discussion: Pincer nail deformity is hereditary or acquired transverse overcurvature of the nail plate. Although the mechanism of development remains unknown, underlying systemic disease, medications and mechanical deformation are common associations. SLE has been associated with several nail abnormalities (leuconychia, nail pitting, ridging, onycholysis, nail fold erythema, red lunulae, nail fold hyperkeratosis, splinter hemorrhages, and terygium inversum). Pincer nail deformity is associated whit SLE and end stage renal failure has been documented in few cases. Standard treatment has not been established, but conservative and surgical approaches have been described. Conservative treatments such as topical keratolytics are an acceptable option in patients with mild to moderate deformity without pain complains. If the deformity is severe, invasive alternatives have satisfactory results.

Conclusion: As in other published reports, it is difficult to establish if the pincer nail deformity in our patient are secondary to SLE or her renal failure. Most probably is that its etiology could be a result of a multifactorial mechanism. Further investigation is required to elucidate the relationship of the pincer nail deformity to systemic diseases.

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Plasmablastic lymphoma—An uncommon aggressive tumor presenting at a skin cancer screening service

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A 63-year-old retired electrician was seen at our skin cancer screening clinic with a 6-week history of a rapidly growing painful mass on his left chest wall. He admitted malaise, "drenching" sweats and weight loss. He had a history of an IgA paraprotein being detected 18 months earlier, but bone marrow biopsy showed no abnormality and the paraprotein later became undetectable. He is a type 2 diabetic, controlled with oral therapy and diet. On examination, he had an extensive (20 × 30 cm), raised, indurated, purple, and apparently vascular mass involving a large portion of his left chest wall with subcutaneous extension. We considered cutaneous extension of an internal malignancy, myeloma, angiosarcoma and Merkel cell carcinoma within the clinical differential diagnosis. Initial investigations included a diagnostic biopsy, screening bloods, chest x-ray, and CT of the chest, abdomen, and pelvis. Following extensive immunocytochemistry and specialist dermatopathology review a diagnosis of PBL was favored with a differential of plasmablastic myeloma. EBV and HIV testing were negative. The CT scan confirmed a large mass in the chest and abdominal wall with extensive subcutaneous involvement and extension into the thorax and abdomen. Lytic lesions were noted in the sternum and spine but bone marrow aspirate and biopsy showed reactive changes only. After a combined consultation with the hematologists he was commenced on 50 mg prednisolone daily. He is subsequently undergoing chemotherapy (DA-EPOCH) with curative intent and it is planned to offer autologous stem cell transplant if remission achieved. PBL is an aggressive and rare subtype of diffuse large B-cell lymphoma, often related to EBV infection. It was originally described in 1997 in the oral cavity of those with AIDS. It can be difficult to diagnose and treat. Although strongly associated with HIV infection, it is also seen in immunocompetent individuals. There is no established standard of care and it is resistant to standard chemotherapy regimens with a high and early relapse rate. Survival beyond six to twelve months is unusual. We report an uncommon cutaneous presentation of a rare and aggressive systemic lymphoma at the skin cancer screening service which highlights the skin as a site of systemic lymphoma involvement and the importance of clinicopathologic correlation and a multidisciplinary team in the management of these rare tumors.

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Platelet-rich fibrin for the treatment of nonhealing ulcers

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Introduction: Chronic cutaneous ulcer is often a challenging task for a treating physician and it also poses significant physical and mental morbidity to the affected patient. A conventional criterion standard treatment for nonhealing ulcers is not available. In this context, platelet-rich fibrin, which is an immune and platelet concentrate collecting on a single fibrin membrane, containing all the constituents of a blood sample are favorable for wound healing and immunity.

Case 1: A 56-year-old female patient presented with nonhealing ulcers of size approximately 15 × 10 cm over bilateral anteriomedial aspect of upper thighs for more than one year. The ulcers had irregular margins with slopy edges and granulation tissue over the base that did not respond to any of the conventional treatment. Autologous platelet rich fibrin was used to treat the ulcer which was prepared by centrifuging the patient's blood without anticoagulants at 3,000 rpm for 10 minutes. The fibrin clot was isolated and applied over the ulcer followed by a hydrocolloid dressing. This was repeated every week. Complete resolution with overlying normal skin was noted at the end of 6weeks.

Case 2: A 54-year-old man presented with a chronic nonhealing ulcer over the right foot for 3 years of size 3 × 4 cm with irregular margins, punched out egdes and slough over the base. It did not respond to any of the conventional therapies. PRF was applied over the ulcer and it had gradually reduced in size with healthy granulation tissue that completely resurfaced within 3 sessions.

Conclusion: Autologous fibrin-rich therapy represents greater similarity to the natural healing process; it is a safe, owing to its autologous nature, and a cost-effective option in the treatment of chronic nonhealing cutaneous ulcers.

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Platelet-rich plasma for skin rejuvenation: A systematic review of the clinical evidence

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Background: Recently, platelet-rich plasma (PRP) has been used as an off-label treatment for a variety of clinical conditions including skin rejuvenation (SR). The effectiveness of PRP for SR is unclear due to lack of standardization for PRP administration. We aimed to assess the level of evidence (LOE) for safety and efficacy of PRP for SR.

Methods: Pubmed, Embase, Cochrane Library and Scopus were searched for studies published from inception through July 2017. Study selection and data extraction were performed by two independent researchers using predetermined eligibility criteria. Studies evaluating PRP efficacy for SR were evaluated based on methodologic quality and assigned a corresponding LOE.

Results: Criteria were met for 16 studies. Randomized controlled trials (RCTs; n = 6), non-RCTs (n = 2), and prospective cohort studies (n = 8) with a total of 301 subjects (97% female) were included. Number of PRP treatment sessions ranged from 1 to 6 (median = 3) with treatment intervals of 2 to 12 wks (median 4.6). Only 3 studies (a total of 40 subjects) required a minimum baseline CBC platelet level (100, 105, and 150 × 10^9/L) for study entry and only 3 studies (41 subjects) determined platelet concentration of the administered PRP (range 700-3,760 × 10^9/L). Histopathology was done in 5 studies (78 subjects) and all showed increased collagen volume, enhanced collagen organization, and increased fibroblasts. Wrinkle improvement was assessed in 288 subjects, of which 249 (86.49%) showed at least some improvement, however data did not support a lasting effect. Fine wrinkling showed more improvement than deep wrinkling and improvement in wrinkle reduction was better at follow-up times of ≥3 months (highly variable) vs. 1 month. PRP adverse events were, in order of frequency; erythema, burning sensation, pain, and bruising, and all were judged to be mild and transient. No serious adverse events were reported.

Conclusion: The LOE from the 16 studies reviewed indicates that PRP was generally well tolerated and demonstrated efficacy for fine wrinkling in photoaged skin. The level of evidence was limited by the quality and heterogeneity of the studies. PRP treatment regimens for skin rejuvenation remain nonstandardized, with variable dosing and numbers of treatment sessions. Further high-quality double-blind RCTs with sufficient follow-up are warranted to help optimize this potentially useful treatment approach to skin rejuvenation.

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