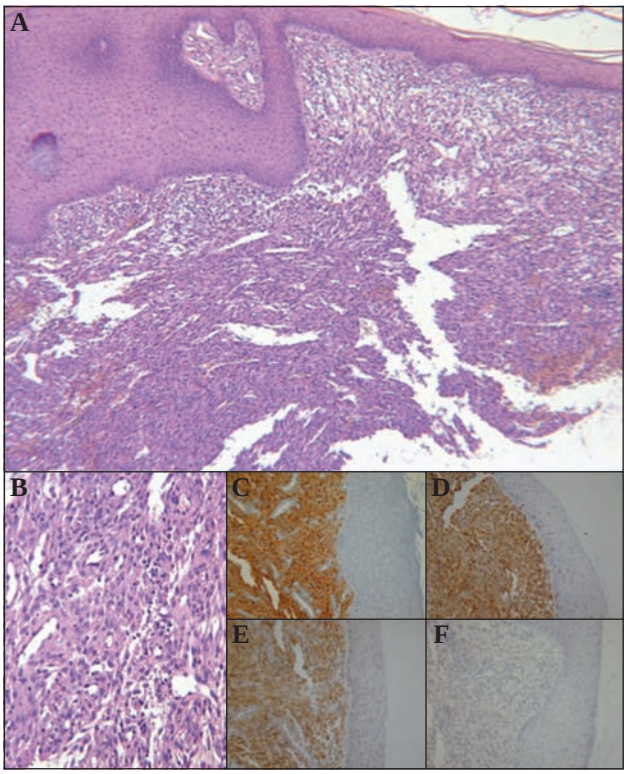

Figure 1. A) Intradermal proliferation of spindle-shaped or polygonal cells with a granular eosinophilic cytoplasm, at examination at higher power **(B)** (H&E).
C-F) Immunohistochemistry demonstrates reactivity to CD10 **(C)**, Vimentin **(D)**, CD 68 **(E)** and enolase **(F)**.

an epidermal collarette, or pseudoepitheliomatous hyperplasia of the overlying epidermis [2-4].
Immunohistochemical investigations [1-6] have shown that nearly all cases were positive for NKIC3 (25 out of 26 cases available for analysis), a lysosomal marker with no real cytospecificity; most tumors were also positive for CD68 (22/27), neuron-specific enolase (8/15), PGP 9.5 (5/7) and vimentin (6/8); they were rarely FXIIIa-positive (2-11), whereas they were negative for S-100 protein, smooth muscle actin, melan-A, HMB45, CD34, EMA (epithelial membrane antigen), desmin and cytokeratin. Recently, Al Habeeb [4, 5] also suggested CD10 (3 of 3) as a helpful marker for this neoplasm.
Two cases of distant metastasis, both to lymph nodes, have been described [3, 4]. In one [3], an enlarged regional lymph node was removed 25 months after excision of the primary lesion. No other metastases arose over the next 95 months, but this patient's primary excision had been incomplete. In another case [4] clinical suspicion of melanoma led to excisional biopsy of the sentinel lymph node and to enlargement of the surgical scar nine months after the primary resection. No metastases or recurrent disease have been found 26 months from the initial presentation; the patient is being closely followed since complete lymphadenectomy was not performed.
Although the tumor is extremely rare, we present this case because the diagnosis is probably underestimated, it should be kept in mind when confronted with entities such as pyogenic granuloma and melanoma. Diagnosis requires a combination of histology and immunohistochemistry. Dermal non-neural granular cell tumor should be considered as a low-grade malignant neoplasm with lymph node metastasizing capacity and a very slow course.
The report of additional cases and longer follow-ups are required for treatment and follow-up guidelines to be developed. Once a diagnosis of dermal non-neural granular cell tumor is made, complete excision (or wider margins of a previous wound) is certainly appropriate. Follow-up with ultrasound should also be performed, whereas routine sentinel node biopsy is still a matter of debate, given the indolent clinical course. ■

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Adjuvant clinical effects of polydeoxyribonucleotide in lichen sclerosus

We report a group of 18 individuals (12 males, 6 females, aged 22 to 64 years) suffering from mild to severe genital lichen sclerosus (LS). All patients had a history of unresponsiveness or slight improvement to potent topical steroid (clobetasol 17-propionate 0.05%). The patients were evaluated in compliance with the recent guidelines of

the British Association of Dermatologists for lichen sclerosus (BAD 2011).We made a diagnosis of LS on the basis of clinical data, and in some cases (3 patients, 1 male, 2 females), by biopsy, which confirmed the clinical approach. We decided to perform, after informed consent, sub-dermal injections of a solution of polydeoxyribonucleotide (PDRN), on the pathology site, twice a month, for 16 weeks, in combination with a daily home application of 2 creams composed respectively of polyunsaturated fatty acids, ubiquinon Vit. E and fluticasone dipropionate. During this period the patients did not develop any severe local reactions causing treatment discontinuation and, after 16 weeks, they showed marked improvements *(figure 1)*.

Lichen sclerosus (LS) is a complex chronic inflammatory skin disease, with a predilection for genital skin. The exact pathogenesis of LS remains unclear but it is generally accepted as an autoimmune pathogenetic pathway [1]. The histopathology of LS suggests abnormalities in extracellular matrix composition and important immunological skin inflammation, which lead to sclerosis and tissue atrophy. The treatment of LS is currently under discussion. Currently, the first-line treatment of LS consists of ultra-potent local steroids. Lichen sclerosus represents a therapeutic challenge, for this reason we describe our experience of using PDRN in combination with topical steroid therapy.

We enrolled 18 individuals (12 males, 6 females, aged 22 to 64 years) with a history of genital lichen sclerosus involving both the prepuce and penis gland in men, or the clitoris and labia minora in women. All patients were subjected to sub-dermal injections of polydeoxyribonucleotide solution (5,625 mg of PDRN in a 3-mL) in the LS site, after local anaesthesia (lidocaine/prilocaine 25 mg + 25 mg cream under occlusion for 15-20 min). During this therapy, all patients followed a daily topical home application, with 2 topical creams composed respectively of polyunsaturated fatty acids, ubiquinon Vit. E and fluticasone dipropionate. Four patients were subjected to penile frenuloplasty before the beginning of the therapy because of an irreversibly sclerotic frenulum.

After therapy, we observed a marked improvement in all patients. 9 patients showed complete clinical healing. The best results were seen particularly for the inflammation and hypertrophic aspect due to LS. In two cases we saw the resolution of an inflammatory tight phimosis. After therapy, 12 out of 18 patients reported having resumed sexual activity, previously impaired by the disease. All clinical improvements persisted for 5 months after the discontinuation of therapy.

PDRN, an A2A adenosine receptor, acts as a mitogen for fibroblasts [2], endothelial cells and pre-adipocytes, working with different growth factors (VEGF, PGF, FGF). Commonly, PDRN is used in plastic and dermatologic surgery, and recently in urology, for its regenerative properties, for restorative effects in ischemic skin flaps [3], and to improve intra-testicular vascularisation [4]. Recently, the effects of PDRN have been analysed in a number of tissues, such as human bone and corneal epithelium [5]. PDRN has shown proliferation effects in human pre-adipocytes, which represent the richest reservoir of adult human stem cells [6]. In this context, we highlight through this preliminary study and for the first time in this dermatological disease, the efficacy, tolerability and safety profile demonstrated by PDRN, which could be cited, (if further studies confirm these early data), as one of the effective therapies in the management of lichen sclerosus. ■

Figure 1. A) Complete resolution of hypertrophic/atrophic areas and ecchymoses. **B)** Complete resolution of a tight edematous phimosis. **C)** Complete remission of clinical pathological signs of LS involving the prepuce and frenulum areas. **D)** Disappearance of hypertrophic plaque of LS on the gland. **E)** Reduction of atrophy and noticable decrease of inflammation on lesion edges.

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Unusual cutaneous manifestations of Churg-Strauss syndrome mimicking Wells' syndrome

Churg-Strauss syndrome (CSS) and Wells' syndrome (WS) are rare conditions, both characterized by eosinophilia and tissue eosinophilic infiltration. However, cases in which they are associated are extremely unusual, with only four