

## QUIZ SECTION

### Nodular Lesions on Post-surgical Scars: A Quiz

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A 77-year-old woman presented to our dermatology clinic with a 3-month history of asymptomatic nodules, which appeared on her lip, and neck scars. The scars had appeared after surgery for squamous cell carcinoma of the inferior alveolar gingival one year previously. During surgery, a segmental resection and reconstruction of the mandible and the lips, using an infrahyoid flap, was performed. Laterocervical lymphadenectomy was also carried out. Clinical examination revealed lower lip swelling due to the presence of multiple, tender, reddish-brownish nodules, 0.5–1 cm in size, on scars and on the mucosal side of the lip (Fig. 1). A few similar lesions were also present on the upper lip and on a neck scar. No other lesions were found on the skin.

*What is your diagnosis? See next page for answer.*



*Fig. 1. Frontal view: yellowish-brown nodules within the scars on the lips.*

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## ANSWERS TO QUIZ

**Nodular Lesions on Post-surgical Scars: Comment**

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**Diagnosis: Scar sarcoidosis**

Histopathological examination showed non-caseating granulomatous inflammation with multinucleate giant cells surrounded by a few lymphocytes. Stains for mycobacteria and fungi were negative. Upon diascopy, nodules demonstrated an apple-jelly coloration. Chest radiography and computed tomography (CT) scan did not reveal significant alterations.

Scar sarcoidosis is characterized by nodular infiltration that appears on either recent or old scars ( $\leq 30$  years old) (1). Trauma, burn, injection, venipuncture, tuberculin test site, and local skin injury scars have been known to develop scar sarcoidosis (1–3). The exact incidence is unknown, it is estimated that scar sarcoidosis represents approximately 6–14% of cutaneous sarcoidosis lesions in adults (4). The aetiology of both scar and systemic sarcoidosis is unknown, although it has been hypothesized that infectious agents or contamination by foreign material in scars can trigger sarcoidosis in individuals with a genetic susceptibility for this disease (3, 5). The majority of patients with scar sarcoidosis have systemic disease, and scar inflammation is considered an activity index for this condition. In the absence of systemic involvement, 30% of patients with only cutaneous lesions may develop future systemic manifestations (1–5). This aspect was not seen in our clinical case, at least after a one year follow-up, but continued surveillance is mandatory (4, 5).

The differential diagnosis includes foreign body granuloma, hypertrophic and keloid scarring (6). Therefore, in our patient, orificial tuberculosis and extra-intestinal Crohn's disease must also be considered due to the atypical localization of the lesions. Conventional treatment for cutaneous sarcoidosis, in patients with localized disease, consists of topical therapy with glucocorticoids. However, systemic corticosteroid therapy is sometimes needed (7). Our patient was treated successfully with a decreasing dosage of oral methylprednisolone (from 25 to 5 mg/day) for 2 months associated with topical mometasone.

*The authors declare no conflicts of interest.*

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