QUIZ SECTION

Progressive Facial Lesions, Comedones and Wrinkles in a Farmer: A Quiz

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A 75-year-old male agriculturist presented with a 20-year history of gradually progressive, asymptomatic, dark-coloured facial lesions accompanied by coarsening of facial features. On examination, thickened, inelastic skin with deep wrinkles and furrows was noted across the entire face (Fig. 1). Numerous large open and closed comedones with central dark plugs, along with yellow-to-brown papules and nodules were also observed across the facial surface (Fig. 2). These clinical features were particularly pronounced on the forehead, nasal bridge, zygomatic regions, and malar cheeks, areas commonly exposed to chronic ultraviolet radiation. The skin exhibited a diffuse yellowish hue along with atrophic changes.

The patient presented with dermoscopic findings indicative of chronic actinic damage and comedonal acne, including circular homogeneous structures with keratin plugs (open and closed comedones), yellowish discoloration

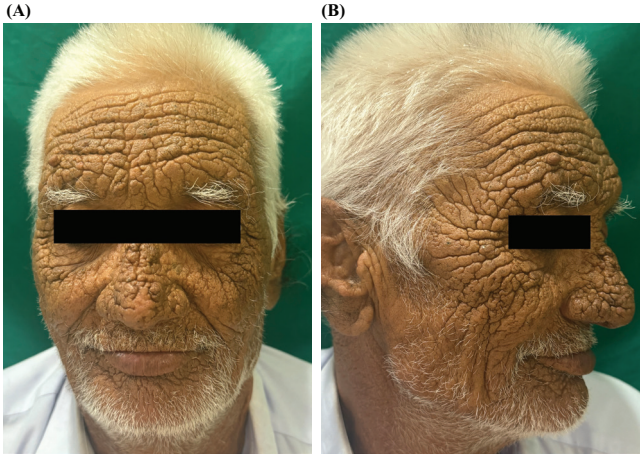

Fig. 1. Clinical characteristics. Thickened inelastic skin with deep wrinkles and furrows, particularly pronounced on the forehead, nasal bridge, zygomatic regions, and malar cheeks.

Fig. 2. Clinical characteristics. Numerous large open and closed comedones with central dark plugs.

consistent with solar elastosis, linear arborizing vessels suggestive of telangiectasias, enlarged pilosebaceous openings, and pigmentary alterations distributed across the facial skin.

Additionally, the patient demonstrated cutis rhomboidalis nuchae, a condition characterized by thickened, leathery skin at the nape of the neck with intersecting rhomboidal furrows, often linked to chronic sun exposure. He had a smoking history spanning 4 decades and worked as a farmer with extensive daily sun exposure (8–10 h) without employing sun-protective measures. Despite his prolonged exposure, he denied any chemical exposure, systemic diseases, drug use, or previous cosmetic treatments. The bilaterally symmetrical nature of the lesions coupled with the visible changes to his facial features resulted in significant emotional distress affecting self-esteem and quality of life.

What is your diagnosis?

Differential diagnosis 1: Favre–Racouchot syndrome

Differential diagnosis 2: Chronic actinic dermatitis

Differential diagnosis 3: Sarcoidosis

Differential diagnosis 4: Lepromatous leprosy

See next page for answer.

Progressive Facial Lesions, Comedones and wrinkles in a Farmer: A Commentary

Acta Derm Venereol 2025; 105: adv42730.
DOI: 10.2340/actadv.v105.42730

***Diagnosis*: Favre–Racouchot Syndrome**

Favre–Racouchot syndrome (FRS), also referred to as senile comedones or nodular elastosis, arises primarily due to chronic ultraviolet (UV) exposure (1). Initially described by Maurice Favre in 1932 and later expanded upon by Favre and Jean Racouchot in 1951 (2), the condition is characterized by comedones and cysts typically localized to sun-damaged areas such as the temples, cheeks, and periorbital regions. The pathogenesis is linked to prolonged UV radiation, which induces elastic fibre degeneration in the dermis coupled with sebum retention, culminating in the formation of characteristic lesions. Heavy smoking is also implicated as a synergistic factor further exacerbating the condition (2).

FRS predominantly affects individuals with lighter skin, with an estimated prevalence of 1.4% in adults and 6% among white men over 50 (3). While primarily observed in middle-aged to elderly individuals, rare cases have been reported in younger populations. Males are disproportionately affected, likely due to greater UV exposure and smoking habits. Associated conditions include cutis rhomboidalis nuchae, actinic comedonal plaque, actinic keratosis, basal cell carcinoma, squamous cell carcinoma, trichostasis spinulosa, keratoacanthoma, and eyelid papilloma (4). Clinically, the condition manifests as yellowish skin with prominent open comedones and deep wrinkles, predominantly in sun-exposed areas. Severe cases may present with papules, nodules, and cystic lesions, occasionally extending to the neck and forearms.

Diagnosis is largely clinical, but histopathology can confirm findings, revealing epidermal atrophy, solar elastosis, and basophilic degeneration of the dermis. Characteristic features include dilated pilosebaceous units, atrophic sebaceous glands, and cyst-like spaces filled with keratin, sebum, bacteria, and vellus hairs (4).

In this patient, Favre–Racouchot syndrome (FRS) is distinguished from actinic dermatoses by its hallmark clinical features, which are predominantly localized to sun-exposed areas of the face. In contrast, actinic dermatoses are typically associated with more extensive photodamage, manifesting as pigmentation changes and the development of actinic keratoses in broader areas of chronic sun exposure. Moreover, Favre–Racouchot syndrome is differentiated from sarcoidosis by the absence of systemic involvement and granulomatous changes. Similarly, it is clearly distinguished from lepromatous leprosy, which is characterized by hypopigmented lesions, nerve thickening, anaesthesia, and the presence of acid-fast bacilli (AFB) in skin smears, none of which were observed in this case. Histopathological examination further supports the diagnosis of Favre–Racouchot syndrome, revealing the characteristic features of solar elastosis, dilated pilosebaceous follicles, and cystic changes, which are diagnostic of this syndrome.

The patient was advised to implement sun-protection measures and discontinue smoking. Treatment options include comedone extraction, topical retinoids, chemical peels, laser resurfacing, and surgical excision in severe or functionally impairing cases, although the patient was unable to attend follow-up appointments. Topical retinoids remain a cornerstone of therapy promoting collagen repair and elastin remodelling, though prolonged treatment and local side effects may reduce compliance. Laser therapies such as carbon dioxide lasers offer high efficacy with better patient adherence due to minimal side effects and fewer sessions. Plasma exeresis has shown promising cosmetic results, being quick and minimally invasive.

Surgical approaches, including excision and dermabrasion, are reserved for advanced cases or when malignancy cannot be excluded. Regular follow-ups are crucial to assess treatment efficacy and monitor for relapses. Preventative measures such as using broad-spectrum sunscreen, wearing protective clothing and avoiding peak UV exposure are critical for reducing disease progression and recurrence (1).

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