Skin Appendage Disord 2016;2:180–182
DOI: 10.1159/000453004**Two Cases of Gnatophyma, an Unusual Form of Rosacea**Norma Cameli Claudia Cavallotti Luca Muscardin
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To the Editor,

Case 1, a 55-year-old Caucasian female, came to our observation because of an erythematous plaque on her chin, arisen about 5 years before. At physical examination, the lesion appeared infiltrated, edematous, and well defined (50 × 40 mm), with some telangiectasias on the edges and a hard consistency in its central portion (Fig. 1). No other skin lesions were detected. The patient did not complain about itching, pain, or bleeding. Her medical and drug histories reported no relevant elements, except for dental foci and several tooth decay. She referred that the lesion had been treat-

ed in the past with topical corticosteroids, emollient creams, and mild detergents without any improvement. The histopathology of the lesion after incisional biopsy demonstrated irregularly dilated capillary vessels surrounded by lymphocytic perifollicular infiltrates in the upper dermis, dilated follicular infundibula with hyperplastic sebaceous glands, solar elastosis, and increase in fat tissue (Fig. 2). Given this clinical and histologic findings, she was diagnosed with gnatophyma. The patient was then treated with azelaic acid and applied daily sunscreens. At dental examination, poor oral health was revealed: bacterial plaque was present on every tooth, and a general inflammation of the marginal gingiva was noted. Dental care was started. At the 1-month follow-up visit, a significant clinical improvement of the skin lesion was detected.

Case 2, a 50-year-old Caucasian female, presented with a history of an asymptomatic erythema and edema on her chin that had begun about 2 years earlier. There was nothing relevant in her clinical history. There were no dental abnormalities. Physical examination was remarkable for a not well-defined and erythematous patch (Fig. 3). A punch biopsy was taken from the lesion and demonstrated a follicular and capillary vessel dilatation and sebaceous gland hyperplasia as per gnatophyma (Fig. 4).

Rosacea is a common skin disease. Its main clinical manifestations are redness, telangiectasia, papules, pustules, skin thickening, and phymas [1, 2]. Phyma is considered the last evolutionary stage of rosacea. Its most frequent localization is in the nose (rhinophyma), but more rarely, it can occur at chin level (gnatophyma), forehead (metophyma), ears (otophyma), and eyelids (blepharophy-

Fig. 1. A 55-year-old female patient presenting an erythematous, infiltrated, edematous, and well-defined plaque on the chin, with some telangiectasias on the edges.

Fig. 2. Dilated follicular infundibula with hyperplastic sebaceous glands, solar elastosis, and increase in fat tissue.

ma) [2]. Four variants of phyma (glandular, fibrous, fibroangiomatous, actinic) can be recognized on clinical and histological basis [3]. Gnatophyma is a sporadically identified phyma variant in the literature with both clinical and histopathological characteristics which is difficult to diagnose because of the rarity of its occurrence. Gnatophyma may appear alone or coexist with rosacea lesions [4–6]. It has been rarely reported indeed. There are only four cases in the scientific literature, three of them were female and one was male. All of them had manifestation exclusively on the

chin. The patients reported here are both female and also have lesions exclusively on the chin. This kind of localization can be attributed to chronic inflammation of rosacea causing lymphatic system failure and lymphedema [7]. Associations between dental or periodontal foci and rosacea have been reported to occur rarely; a significant improvement in rosacea after a dental treatment was reported [8]. Our first case of gnatophyma was associated with dental foci and multiple tooth decay; she reported clinical improvement of skin manifestations after starting an appropriate

Fig. 3. Asymptomatic erythema and edema on the chin in a 50-year-old female patient.

Fig. 4. Follicular and capillary vessel dilatation and sebaceous gland hyperplasia as per gnatophyma.

Fig. 5. Case 1 after treatment.

Fig. 6. Case 2 after treatment.

dental treatment together with topical skin treatment (Fig. 5). In the second reported case, gnatophyma manifestations were slighter and more superficial, and no dental abnormalities were found. The lesions were managed with topical nonsteroidal anti-inflammatory balms and emollients (Fig. 6).

The treatment of rosacea and the different forms of phymas is multifold including metronidazole or azelaic acid creams, crota-miton or permethrin creams, atenolol, clonidine, oral antibiotics (metronidazole, doxycycline, minocycline, clarithromycin), and oral isotretinoin. Surgical management is becoming a first-line treatment for all phymas and current approaches include electro-surgery, ablative laser resurfacing, dermabrasion, and nonablative laser therapy [9, 10]. As our two cases were both detected at the initial stage of the disease without any clinical nodular tissue hypertrophy associated, we decided for a topical care.

In conclusion, phymas represent the end stage of rosacea and may present atypically on facial areas such as the chin. Diagnosis and treatment of phyma with atypical localization may be a challenge for dermatologists in clinical practice.

Statement of Ethics

Patients' consent was obtained. The principles of the 1975 Declaration of Helsinki were followed.

Disclosure Statement

The authors declare that they have no competing financial interests or other potential conflict of interests.

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