Case Report

Multiple Miliary Osteoma Cutis of Face

Anup K. Lahiry
Department of Dermatology, Apollo Hospitals, Secunderabad, Telangana, India

Abstract

Multiple miliary osteoma cutis is an uncommon condition presenting as multiple skin-colored papules of variable sizes on the face. A 48-year-old woman presented with multiple skin-colored hard papules on both cheeks. Examination revealed firm-to-hard dome-shaped asymptomatic papules in cluster over both cheeks. A punch biopsy was performed, which showed evidence of focal bony trabeculae with associated normal appendages. Few larger papules were incised and followed up with curettage of bony material and closed. All lesions could not be incised and removed because of large number of lesions in cluster.

Keywords: Face, multiple, osteoma, osteoma cutis

Key message: An uncommon disease of middle age, aesthetically difficult to manage with no consensual mode of management.

Introduction

Osteoma cutis is a disease of the middle age, a condition characterized by the formation of bone within the skin. It is highly unusual, unique, and challenging with both diagnostic and therapeutic problem. Only 23 cases have been described in the English literature.[1] Such aberrant ossification of the skin and subcutaneous tissue is considered primary when it arises in the absence of underlying tissue damage or preceding skin disease. Conversely, secondary osteoma cutis occurs following preexisting skin lesions or certain medications such as alendronate.

A middle-aged woman with multiple military osteoma cutis lesions on both cheeks of few years duration without any preceding severe skin disease is described here. Mild acne on and off was her only complaint during adolescent age.

Case History

A 48-year-old woman presented with skin-colored multiple papules on both cheeks since few years [Figure 1], which gradually increased in number and size over years. Papules were asymptomatic, hard to feel, arranged in cluster over both cheeks, and of variable size. History of mild Grade 2 acne at the site of lesions was noticed. The patient was otherwise generally healthy. No family history of similar disease was elicited. Routine laboratory test along with serum calcium/phosphorus and vitamin D were within the normal limits. A punch biopsy performed for histopathological examination revealed multiple focal bony trabeculae with osteoblasts and normal appendages [Figure 2]. A diagnosis of osteoma cutis was made. The X-ray antero-posterior view showed multiple, miliary opacities in the inframaxillary region. Treating multiple lesions was difficult, so few larger lesions were incised, bony material was curetted, followed by the closure of the wound. Topical tretinoin was advised to be used at night for the rest of the lesions. The patient is under follow-up.

Discussion

Miliary osteoma cutis of the face is a rare benign, extraskeletal bone formation. It was first described by Wilekens in 1858.[2] Only 23 cases have been described in the English literature.[1] This condition can be primary or secondary. Secondary osteoma cutis could be due to preexisting skin diseases such as acne, pilomatricoma, scars, basal cell carcinoma, or trauma. Four syndromes such as Albright's hereditary osteodystrophy,

Access this article online

Quick Response Code:

Website: www.jcasonline.com

DOI: 10.4103/JCAS.JCAS_54_17

Address for correspondence: Dr. Anup Kumar Lahiry, Villa 54, Ashoka Ala Maison, Dullapaly Road, Kompally, Secunderabad, Telangana 500014, India.
E-mail: anup57@yahoo.com

How to cite this article: Lahiry AK. Multiple miliary osteoma cutis of face. J Cutan Aesthet Surg 2018;11:95-7.

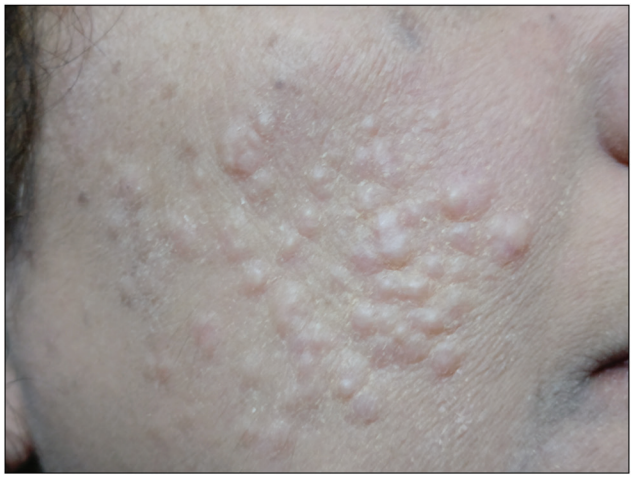

Figure 1: Skin-colored papules on cheeks

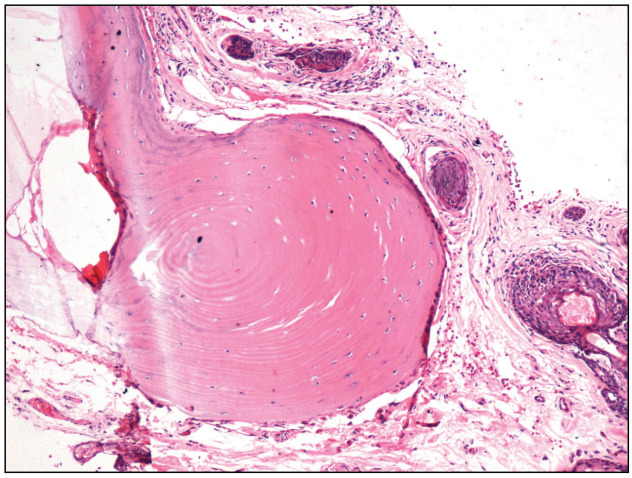

Figure 2: Histopathological section showing bone structure with osteoblasts

fibrodysplasia ossificans progressiva, progressive osseous heteroplasia, and plate-like osteoma cutis are associated with this condition.

These lesions are asymptomatic and can appear on scalp, face, trunk extremities, and buttocks. The diagnosis of the condition can be suspected by clinical and radiological examination, but confirmation is based on finding bony trabeculae in the histological sections.

The pathogenesis of the disease remains debated, the more plausible being osteoblastic metaplasia of mesenchymal cells such as fibroblasts.[3] Level and Lawrence[4] reported that a long-standing inflammation can cause mesenchymal cells to differentiate into osteoblasts.

The procedures of treatment for this condition are multiple. Medical management with topical tretinoin enables transepidermal elimination of the bone. Some authors prefer surgical modalities such as dermabrasion, punch excision, and microincision–extirpation methods. The microincision–extirpation method[5] looked aesthetically acceptable procedure, and the same method

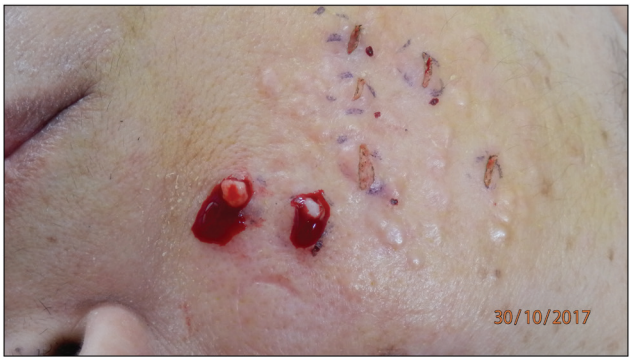

Figure 3: Incisional extrusion being carried out

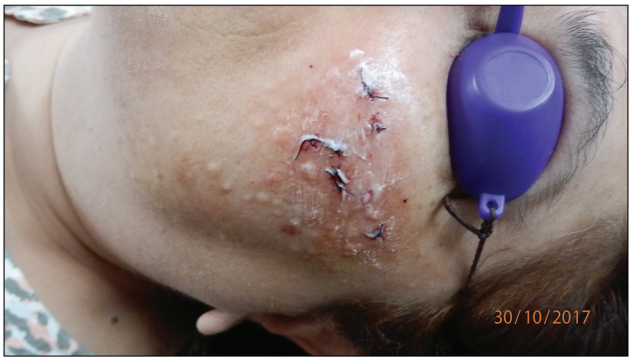

Figure 4: Closure after

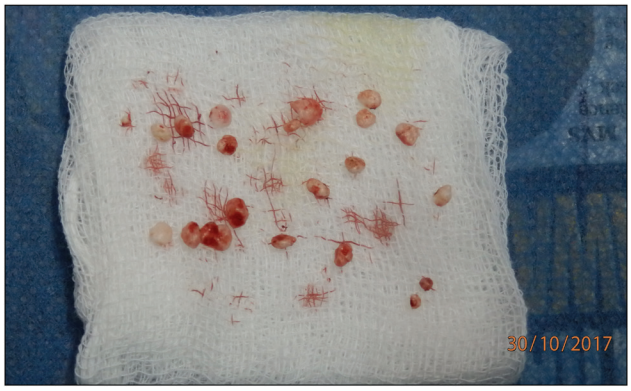

Figure 5: Extruded miliary pellets

was used to remove some of the larger lesions of the patient [Figures 3-5].

Conclusion

The rarity of presenting with hundreds of miliary osteoma cutis in a case with a history of milder acne vulgaris during her adolescent age was the reason that prompted me to present the case. In addition, managing so many lesions to give a cosmetic improvement was challenging.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/

her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Acknowledgement

I would like to thank my colleague Dr. I. S. Reddy for helping me in getting references and microphotograph.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Bouraoui S, Mlika M, Kort R, Cherif F, Lahmar A, Sabeh M. Miliary osteoma cutis of the face. J Dermatol Case Rep 2011;5:77-81.
2. Essing M. Osteoma cutis of the forehead. HNO 1985;33:548-50.
3. Burgdorf W, Nasemann T. Cutaneous osteomas: a clinical and histopathological review. Arch Dermatol Res 1977;260:121-35.
4. Level NJ, Lawrence CM. Multiple papules on face. Multiple miliary osteoma cutis. Arch Dermatol 1994;130:373-4.
5. Baskan FB, Turan H, Tunali S, Toker SC, Adim SB, Bolka N. Miliary osteoma cutis of the face: treatment with the needle microincision–extirpation method. J Dermatol Treat 2007;18:252-4.