## Milia en plaque: Treatment with Open Spray Cryosurgery

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Sir.

Milia en plaque (MP) is a rare cutaneous condition usually occurring in a periauricular distribution; anterior areas of the ear, as well as retroauricular skin and ear lobes, can be involved. Minocycline (1), topical tretinoin (2, 3) and electrodesiccation (4) have been proposed as treatment for MP, generally with poor results. Topical tretinoin can give rise to local intolerance (5), while electrodesiccation can lead to poor aesthetic results. To our knowledge, there are no published data about cryosurgery in MP.

#### CASE REPORT

A 32-year-old woman presented with bilateral, retroauricular plaques due to primary MP (Fig. 1). The background of the plaques was slightly pinkish in colour, with well-circumscribed borders; within this context, many small, whitish, smooth milia were present. The plaques had progressively enlarged during the previous 3 years. The affected sites were made up of confluent small clusters of milia cysts, histologically confirmed, that appeared unchanged for one year. The patient denied burns, trauma, use of cosmetics, tar or any other topical compound in these areas.

A single freeze-thaw cycle of 75 sec of open-spray liquid nitrogen cryosurgery was performed without local anaesthesia. Topical gentamycin cream was applied once a day until complete re-epithelization, which occurred after 3 weeks. After 8 weeks, almost complete healing was observed in both sides, with very good aesthetic result and no pigmentary side effects (Fig. 2). There has been no recurrence in 2 years of follow-up.

### DISCUSSION

MP is characterized by a plaque formed by confluence of a number of whitish smooth milia, often with an erythematous, infiltrative background (6). In most cases, slight discomfort is present, as itching or a burning sensation. Histology of MP shows typical laminated keratin-filled cysts circumscribed by a few layers of small flattened basaloid cells; trichilemmal keratinization can be observed occasionally; a granulomatous, rosacea-like pattern has been described (1).

Clinical diagnosis of MP is not difficult; differential diagnosis includes Favre-Racouchout disease, familial or naevoid comedo syndromes, lichen planus tumidus folliculans, secondary milia induced by topically applied perfumes or drugs a corticosteroids and 5-fluorouracil, orally administered benoxaprofen, trauma, radiotherapy, milia secondary to a blistering disease (1, 5).

We suggest treating MP with open-spray cryosurgery, which has been successfully applied in this case and giving excellent aesthetic results. Open-spray cryosurgery with liquid nitrogen usually does not need local anaesthesia and appears to be a



Fig. 1. Whitish milia en plaque with erythematous background.



Fig. 2. Complete healing after 2 years of follow-up.

effective, safe, well-tolerated, time-sparing and not expensive treatment for MP.

### REFERENCES

 Keohane SG, Beveridge GW, Benton EC, Cox NH. Milia en plaque – a new site and novel treatment. Clin Exp Dermatol 1996; 21: 58–60.

- 2. Hubler WR, Randolph AH, Kelleher RM. Milia en plaque. Cutis 1978: 22: 67-70
- 3. Samlaska CP, Benson PM. Milia en plaque. J Am Acad Dermatol 1989; 21: 311–313.
- 4. Lee DW, Choi SW, Cho BK. Milia en plaque. J Am Acad Dermatol 1994; 31: 107.
- 5. Losada-Campa A, De La Torre-Fraga C, Cruces-Prado M. Milia en plaque. Br J Dermatol 1996; 134: 970–972.
- Wong SS, Goh CL. Milia en plaque. Clin Exp Dermatol 1999; 24: 183–185.

# Proximal Subungual Hyperkeratosis of the Big Toe due to Microsporum gypseum

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Sir,

Microsporum gypseum is a geophilous dermatophyte, widespread throughout the world, and is sometimes the pathogenic agent of epidermomycoses such as tinea corporis, pedis, cruris, capitis and kerion in persons who have contact with soil. M. gypseum is seldom the agent of onychomycosis. Here we report on the case of a 46-year-old farmer of normal immune status, who presented with proximal subungual hyperkeratosis of a toenail caused by M. gypseum.

### CASE REPORT

A 46-year-old male farmer presented with a 2-month history of proximally friable whitish nail of the left big toe (Fig. 1). The skin of the adjacent nail fold was normal and the other nails and the rest of the skin were without lesions of a mycotic



Fig. 1. White proximal subungual hyperkeratosis of the left toenail.

nature. The patient had had no previous fungal infections or nail trauma and was apparently healthy.

Specimens for mycological examination were obtained from the affected nail using a nail drill. Direct microscope examination after maceration in 30% KOH revealed septate dermatophytic hyphae. The material was inoculated into Sabouraud dextrose agar with chloramphenicol (CAF), with or without cycloheximide. The cultures were incubated at 25–30°C for 4–6 weeks and were examined twice weekly. Colonies only grew on medium with CAF and cycloheximide. After 13 days the colonies were grainy and sand-coloured. Microscope observation showed ellipsoidal macroconidia shaped like cucumber pickles with 5–6 septa (Fig. 2) typical of *M. gypseum*. Nothing grew on agar without cycloheximide. The culture was repeated twice and the results were identical.

The patient had no history of nail trauma, drug use or other skin diseases such as psoriasis or eczema. Lymphocyte subpopulations were normal and an HIV test was negative. The patient declined systemic therapy and was treated with ciclopirox 8% nail lacquer for 3 months. Clinical improvement, however, was followed by onycholysis, and the patient took 100 mg/day itraconazole for 7 days/month, for 3 months, as suggested by his family doctor, without clinical improvement.



Fig. 2. Ellipsoidal macroconidia with 5–6 septa (lactophenol cotton blue,  $\times$  250).