CASE REPORT

Idiopathic Multiple Eruptive Milia Occurred in Unusual Sites

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Milia are small, white, benign keratinous cysts that are frequently encountered. Multiple eruptive milia are rare, and are characterized by the development of milia that are more extensive in number and distribution than would be expected in primary milia. We report a case of a 19-year-old girl with tiny, white papules in her axillae and on her abdomen with a review of the relevant literature. (Ann Dermatol 22(4) 465~467, 2010)

INTRODUCTION

Milia can be classified as primary or secondary. Primary milia develop spontaneously and are common on the faces of newborns. Primary milia may also be present on the trunk and extremities. In children and adults, primary milia are found mainly on the eyelids and cheeks. Secondary milia may occur anywhere following trauma, for example burns, subepidermal blistering diseases, dermabrasion, radiotherapy, or following topical therapy with glucocorticoids or 5-fluorouracil. Secondary milia may also be associated with certain genodermatoses. Other patterns of milia include milia en plaque and multiple eruptive milia. Milia en plaque is characterized by multiple, minute, white papules within an erythematous plaque, commonly located on the ears.

The first report of multiple eruptive milia was published by Miescher in 1957. Miescher described a case of multiple eruptive milia associated with multiple trichoepitheliomas on the face, thought to be an example of the multiple trichoepithelial syndrome. Langley et al. classified multiple eruptive milia into three categories: 1) spontaneous without a known cause or association (i.e., idio-
idiopathic); 2) a familial pattern with autosomal dominant transmission, and, 3) a component of a genodermatosis. Only six cases of idiopathic multiple eruptive milia have been reported in the English literature (Table 1)4-9, and two cases have been reported in the Korean dermatologic literature10,11. Reported sites of occurrence include the face, scalp, neck, upper trunk, shoulders, and arms. This is the first reported case of idiopathic multiple eruptive milia on the abdomen and axillae. Formerly, the localization of multiple eruptive milia to sun-exposed areas, such as the head, neck, and chest, led some authors to suggest sunlight as a precipitating factor4. As our patient developed milia in non-sun-exposed skin, however, we suggest that stimuli other than sunlight play a role in the pathogenesis of multiple eruptive milia. The causative factor for multiple eruptive milia remains unclear. However, external stimuli such as friction or rubbing may cause invaginations of epidermal cells and result in multiple eruptive milia.

Multiple eruptive milia have also been described in families with autosomal dominant transmission2. Published cases include a father and son presented with eruptive milia on the face, neck, shoulders, upper back, and axillae who were otherwise healthy12, and a mother and son with lesions on the face and upper trunk13. In the latter, the son

<table>
<thead>
<tr>
<th>Reference</th>
<th>Year</th>
<th>Sex/Age at presentation</th>
<th>Site</th>
<th>Affected family members</th>
<th>Associated dermatoses</th>
<th>Pathogenesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thies and Schwarz2</td>
<td>1961</td>
<td>M/66</td>
<td>Face, neck, and upper chest</td>
<td>None</td>
<td>History of nummular dermatitis</td>
<td>Spontaneous</td>
</tr>
<tr>
<td>Langley et al.4</td>
<td>1997</td>
<td>M/71</td>
<td>Upper trunk, shoulders, and arms</td>
<td>None</td>
<td>History of nummular dermatitis</td>
<td>Spontaneous</td>
</tr>
<tr>
<td>Wolfe and Gurevitch6</td>
<td>1997</td>
<td>F/48</td>
<td>Neck and back</td>
<td>None</td>
<td>History of nummular dermatitis</td>
<td>Spontaneous</td>
</tr>
<tr>
<td>Cairns and Knable7</td>
<td>1999</td>
<td>M/15</td>
<td>Eyelids and nose</td>
<td>None</td>
<td>Mild acne vulgaris</td>
<td>Spontaneous</td>
</tr>
<tr>
<td>Diba et al.8</td>
<td>2005</td>
<td>F/68</td>
<td>Scalp and chin</td>
<td>None</td>
<td>Ear eczema</td>
<td>Spontaneous</td>
</tr>
<tr>
<td>Diba et al.9</td>
<td>2008</td>
<td>M/9</td>
<td>Nose, cheeks, and shoulder</td>
<td>None</td>
<td>None</td>
<td>Spontaneous</td>
</tr>
<tr>
<td>Our case</td>
<td>2009</td>
<td>F/19</td>
<td>Abdomen and axillae</td>
<td>None</td>
<td>None</td>
<td>Spontaneous</td>
</tr>
</tbody>
</table>

Fig. 2. The histopathologic features show small keratin-filled cysts in the superficial dermis (H&E, ×100).

Fig. 1. Multiple, white, 1∼2 mm papules are noted on the abdomen and both axillae.
also had striate leukonychia. Multiple eruptive milia have also been reported in association with genodermatoses, such as the basaloid follicular hamatoma syndrome, Rombo syndrome, Bazex syndrome, orofaciodigital syndrome I, and Gärnders syndrome.

Differential diagnoses of multiple eruptive milia include milia crystallina, eruptive syringoma, eruptive vellus hair cyst, and verruca plana. Generalized idiopathic calcinosis cutis mimicking multiple eruptive milia has also been reported, and requires differentiation. Commonly administered treatment modalities for milia include excision, followed by extrusion of the keratin core, carbon dioxide laser, curettage, mild electrocautery, and electrodessication. Successful treatment has also been reported with topical tretinoin and ER: YAG laser.

In summary, we report our experience of a patient with a 5-year history of multiple eruptive milia on her abdomen and in her axillae with no definite causative factor, which represents a rare case of idiopathic multiple eruptive milia that occurred in unusual sites.

REFERENCES