An Asymptomatic Zosteriform Skin-Colored Plaque on the Right Upper Back in a 25-year-old Women

Wu-Ching Chen  Tsen-Fang Tsai*  Yu-Fu Chen  Chih-Ming Hung

CASE REPORT

A 25-year-old female presented with a zosteriform plaque on the right side of the upper back since birth. The skin lesion was asymptomatic. Her general health was well and her delivery was without complications. There was no history of similar lesions in family members and no family history of tuberous sclerosis or consanguinity. On physical examination, the plaque was soft to elastic, well-defined, skin-colored, cobblestone-like along the right T3 — T4 dermatomes. The lesions did not involve the chest and linea alba (Fig 1). A clinical diagnosis of nevus lipomatosus superficialis was made. A skin biopsy was performed on the lateral margin of the plaque.

Fig. 1
The well-defined, skin-colored, cobblestone-like plaque along the right T3-T4 dermatomes of the back

Fig. 2
Sparse, fragmented elastic fibers in the mid-dermis (Elastic tissue stain, X100)

Fig. 3
No alteration of collagen tissue (Masson's trichrome stain, X100)
**DIAGNOSIS: Zosteriform Connective Tissue Nevus**

**DISCUSSION**

In 1921, Lewandowsky first described 3 cases about connective tissue nevus (CTN), and named "naevus elasticus regionis mammariae", since then many cases were reported. The term "connective tissue nevus (CTN)" was first reported by Gutmann in 1926 and was generally accepted by most authors. CTN are hamartomas of all extracellular matrix of the dermis. In 1980, Uitto et al outlined the further subdivision based on the clinical, histopathologic, and genetic considerations and classified CTN as collagen, elastin, proteoglycan or mixed type depending on the predominant component. The clinical appearances of the CTN are varied.

Zosteriform CTN was considered as a separate entity by some authors because of its unusual clinical presentation (bandlike distribution), the lack of genetic pattern of inheritance and the absence of associated abnormalities in other organs. To our knowledge, only 3 cases were reported in the literature since 1944. They all shared the same clinicopathologic features as in our case (Table 1). Histopathologic examination in our case revealed mild elongation of the rete ridges and apparently normal dermis. However, the elastic tissue stain demonstrated sparse, fragmented elastic fibers in the mid-dermis (Fig 2). The Masson's trichrome stain showed no alteration of collagen tissue (Fig 3).

The clinical differential diagnosis of the zosteriform CTN includes shagreen patches in tuberous sclerosis and nevus lipo-matosus superficialis (NLS). Shagreen patches are usually found in the lumbosacral region and have the similarly histologic features of CTN with either a dense, sclerotic mass of broad collagen bundles, mimicking morphea, or normal collagen bundles throughout the dermis. The elastic tissue in some shagreen patches shows fragmentation and clumping, but generally is reduced in amount. NLS often presents in a zosteriform lesion and is characterized by the presence of mature adipose tissue within the dermis. It also has considerable overlap features with CTN and lies within a spectrum by the presence of adipose tissue and varying amounts of other connective tissue components.

**REFERENCES**


---

**Table 1: Zosteriform Connective Tissue Nevus in the Literature**

<table>
<thead>
<tr>
<th>Reference (Year of the publish)</th>
<th>Patient's age (yrs)/Sex</th>
<th>Clinical features</th>
<th>Histologic findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steiner et al., (1944)</td>
<td>5/F</td>
<td>A plaque on the right lower chest and back</td>
<td>Short, fine collagen; decreased, fragmented elastic tissue</td>
</tr>
<tr>
<td>Kozminsky et al., (1985)</td>
<td>23/F</td>
<td>A plaque on the left side of the upper back and the dorsal aspect of the left arm</td>
<td>Sparse, fragmented elastic tissue</td>
</tr>
<tr>
<td>Yeh et al., (2003)</td>
<td>3/M</td>
<td>A plaque on the right abdomen and flank</td>
<td>Sparse, fragmented elastic tissue</td>
</tr>
<tr>
<td>Our case</td>
<td>25/F</td>
<td>A Cobblestone-like plaque on the right upper back</td>
<td>Sparse, fragmented elastic tissue</td>
</tr>
</tbody>
</table>