A Case of Angioma Serpiginosum

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Angioma serpiginosum is a rare acquired vascular lesion that usually presents in the first two decades of life with a predilection for females. A typical lesion is characterized by deeply red nonpalpable puncta that are grouped closely together in macular or netlike patterns on the lower extremities and buttocks. Histopathologically, thin-walled dilated capillaries are seen in some of the dermal papillae and the superficial reticular dermis without extravasation of red blood cells. We report a case of angioma serpiginosum developed on the left chest and left upper extremity in a 18-year-old man. (Ann Dermatol 12(2) 152~154, 2000).

Key Words : Angioma serpiginosum

Angioma serpiginosum (AS) is a rare acquired vascular lesion, described by Hutchinson in 1889[1]. The condition is found almost exclusively in females who manifestate grouped erythematous punctate lesions usually on the lower limbs or buttocks. Histopathologically, thin-walled dilated capillaries are seen in some of the dermal papillae and the superficial reticular dermis without extravasation of red blood cells[2]. In Korea, there has been only one case report of angioma serpiginosum[3]. We report a case of angioma serpiginosum on the left chest and left upper extremity in a 18-year-old man.

CASE REPORT

A 18-year-old man had asymptomatic erythematous puncta and macules on the left chest and upper extremity. About 3 years ago, erythematous puncta appeared on the left forearm. The lesion gradually spread to the left shoulder and chest, and were grouped together in a macular or netlike pattern(Fig. 1). He had a history of treatment of syphilis, but his family history was non-contributory. Physical examination was unremarkable except for the skin lesions. Skin biopsy from the left forearm showed solitary or grouped dilated capillaries in the dermal papillae and the superficial reticular dermis without extravasation of red blood cells and inflammatory cell infiltrates (Fig 2).

We recommended pulsed tunable dye laser treatmet. However, the treatment was not performed because the patient didn't revisit our hospital.

DISCUSSION

Angioma serpiginosum is an uncommon dermatosis rarely reported in literature. Hutchinson[1] (1889) first described the disease as " A Peculiar Form of Serpiginous and Infective Nevoid Disease". Crocker[4] (1894) is credited with giving the eruption its present name.

In 1967, Maj et al.[5] proposed the following clinical and histopathological criteria for the diagnosis of angioma serpiginosum. Clinically, the lesion is vascular ectasia, frequently arranged in gyrate or serpiginous patterns. The condition develops from young age, and is common in females. Lesions are usually distrubuted asymmetrically on the extremities. Clinical evidence of inflammation, hemorrhage and pigmentation are not observed. The histologic features show normal epidermis, dilatation

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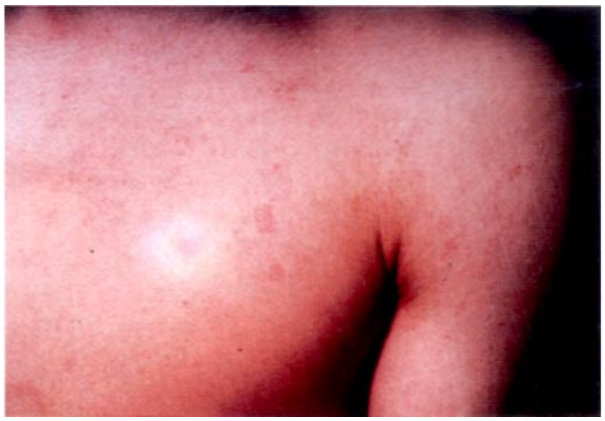

Fig. 1. Grouped, serpiginously arranged telangiectasia and puncta are seen on the left chest and arm.

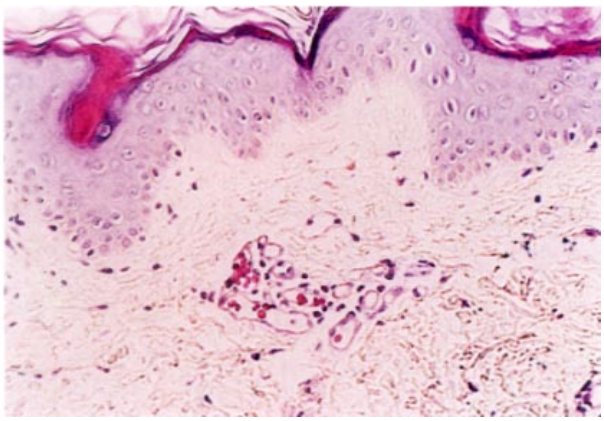

Fig. 2. Dilated, grouped and congested capillaries in the superficial dermis without extravasation of red blood cells(H&E × 400).

of the small vessel of the papillary and subpapillary dermis without extravasation of red blood cells and inflammatory cell infiltrates.

The etiology and pathogenesis of angioma serpiginosum is unknown. It usually develops during late childhood, and is progressive. It has been suggested that the condition may be secondary to increasing levels of estrogen[6]. However Neumann[7] (1977) suggested that angioma serpigonosum may represent an abnormal vascular response to cold exposure.

Angioma serpiginosum is usually sporadic but familial cases have been described[8]. In the previous reports, angioma serpiginosum was described to distribute along the lines of Blaschko[3,10]. In our case, each lesion developed on the left chest and extremity along the lines of Blaschko (C5-6 dermatome).

Histologically, there are widely dilated capillaries in the papillary dermis and superficial reticular dermis, either as solitary units or in clusters[2]. Each vessel is thin-walled and shows no endothelial proliferation. Epidermal changes and extravasation of red blood cells are absent.

The differential diagnosis of angioma serpiginosum includes pigmented purpuric dermatosis, unilateral nevoid telangiectasia, nevus flammeus, chronic purpura, cherry angioma, and tufted angioma. Histologically, pigmented purpuric dermatosis reveals dilated capillaries of the upper dermis, endothelial cell swelling and hyalinization, perivascular inflammatory cells infiltration, extravasation of red blood cells, and hemosiderin pigmentation[11]. Unilateral neveoid telangiectasia presents as numerous dilated vessels in the upper and middle dermis without vascular proliferation. Nevus flammeus presents congenital onset, progressive darkening, dilated vessels without vascular proliferation. Cherry angioma differs clinically by occurance in old age and appearing as small papules on the trunk.

It has been suggested that argon laser or pulsed tunable dye laser was effective for angioma serpiginosum. Long and Lanigan[12] reported that Candela SPTL1 pulsed tunable dye laser was effective for angioma serpiginosum.

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