

Multiple Subcutaneous Granuloma Pyogenicum Combined with Cherry Angioma

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A 51-year-old man had multiple nonspecific subcutaneous nodules and small red hemorrhagic papules on his trunk. Histopathologically, the subcutaneous nodules were shown to be lobular capillary hemangiomas with edematous stroma throughout the entire subcutaneous fat. Multiple subcutaneous granuloma pyogenicum is a rare variant of granuloma pyogenicum. The addition of cherry angioma in the same patient also makes it a very unusual case. (*Ann Dermatol* 4 : (1) 54-56, 1992)

Key Words : Subcutaneous granuloma pyogenicum, Cherry angioma

Granuloma pyogenicum(GP) has several variants, such as the polypoid,¹⁻³ intravenous,^{4,5} subcutaneous,^{6,7} and multiple satellite forms.⁸⁻¹⁰ Cooper & Mills⁷ reported that subcutaneous GP histopathologically showed lobular capillary hemangiomas identical to the common polypoid or intravenous GP. We present an unusual and rare case of multiple subcutaneous GP combined with multiple cherry angiomas.

REPORT OF A CASE

A 51-year-old man visited us with complaints of masses on his trunk and upper extremities for a period of five years. Past history was unremarkable except for diabetes mellitus for 3 years. On physical examination, multiple, flesh-colored, pea to nut-sized, firm, non-tender, movable subcutaneous nodules(Fig. 1) and multiple

pinhead to rice-sized, hemorrhagic papules(Fig. 2) were noted on his trunk and upper extremities. Histopathologically, the two nodules from the trunk and right arm were shown to be partially encapsulated subcutaneous tumors(Fig. 3). They were composed of multiple, discrete and cellular angiomatous lobules separated by tracks or patches of fibromyxoid stroma(Fig. 4). There were a moderate number of histiocytes and lymphocytes in the fibromyxoid

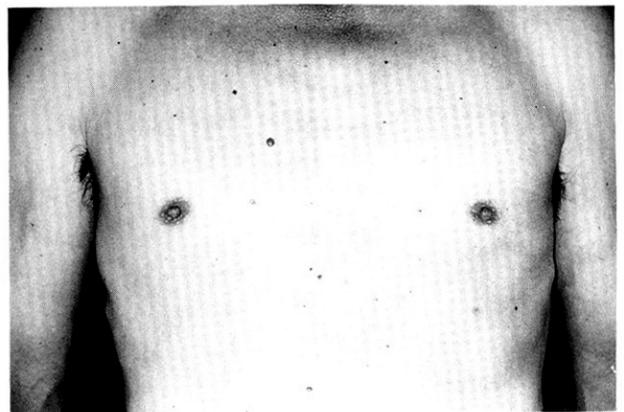


Fig. 1. Multiple red colored hemorrhagic papules on the trunk.

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stroma(Fig. 5). The capillaries in each lobules were dilated and lined by a single layer of endothelial cells(Fig. 6). A skin biopsy was not done on the cherry angioma lesions. Laboratory

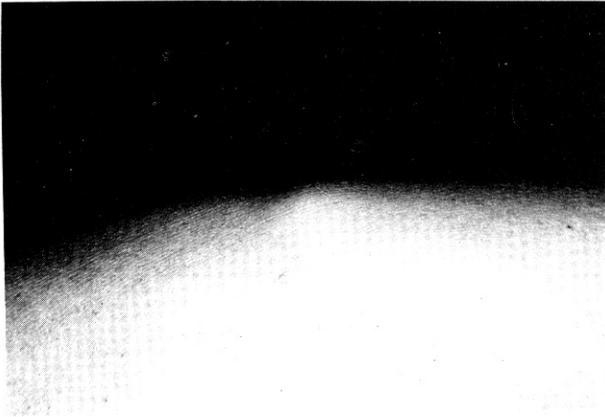


Fig. 2. Flesh colored, firm, nontender movable subcutaneous nodules on the arms.

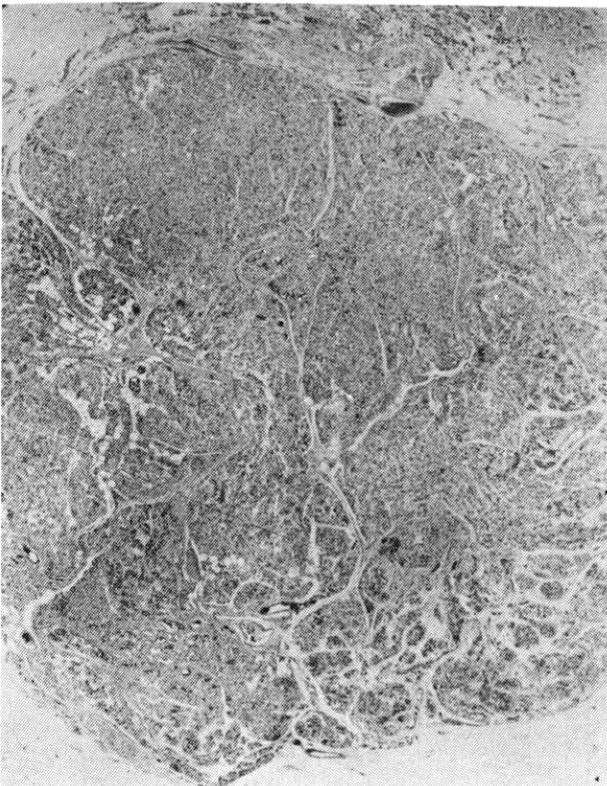


Fig. 3. Partially encapsulated lobular masses occupying an entire panniculus(H & E stain, $\times 5$).

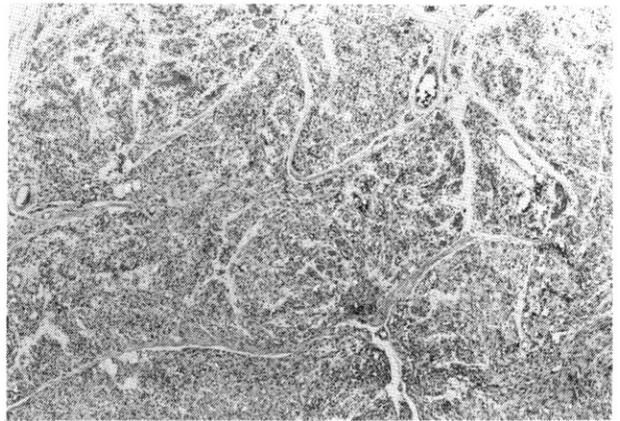


Fig. 4 Mass composed of multiple discrete cellular angiomatous lobules separated by thin collagen bundles(H & E stain, $\times 15$).

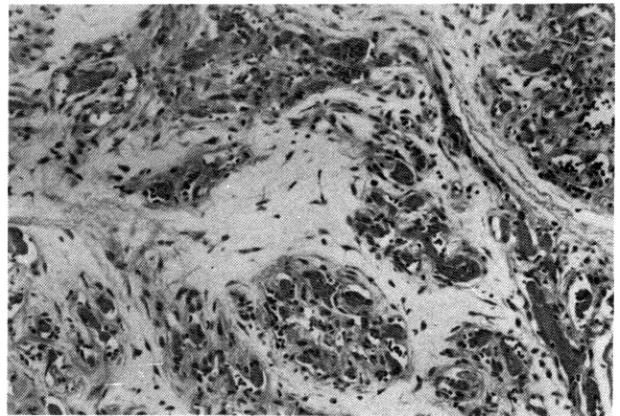


Fig. 5. The edematous and myxoid stroma surrounding capillary proliferation(H & E stain, $\times 50$).

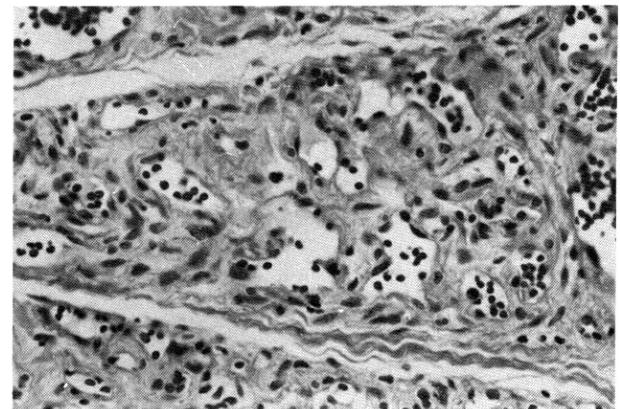


Fig. 6. The dilated capillaries, lined by a single layer of endothelial cells(H & E stain, $\times 100$).

studies, including complete blood count, urine analysis, liver function test, stool examination with occult blood and HIV test were within normal limits or negative. Over 1 year interval, without any special treatment, the number of masses increased.

DISCUSSION

GP usually occurs on the skin and mucosa. Typically, although it may arise in any region of the skin, GP appears as a single nodule on the oral mucosa or on the face or upper extremities.^{1,7,11} A relationship with prior trauma is not unusual. GP usually presents as a single or as multiple lesions. Recently, there was a case report of disseminated GP.¹¹ In spite of its rapid growth and sometimes unusual clinical features, GP is a benign neoplasm and simple excision is always curative. Recurrence is rare. Besides the most common polypoid form, variable types of GP exist, such as multiple satellite,⁸⁻¹⁰ intravenous,^{4,5} and subcutaneous form.^{6,7} Cooper and Mills,⁷ in their report of 5 cases of subcutaneous GP, described all 5 lesions as being single and appearing on the extremity between 3 to 8 months. Clinically, the lesions were slightly tender or painless, nonspecific subcutaneous nodules which lacked surface changes. Histopathologically, the lesions showed lobular capillary hemangiomas in the deep tissue. Lee *et al.*¹² reported subcutaneous GP on the interweb of the toe in the form of a single lesion. However, there are no reports of multiple subcutaneous GP. The significance of our report is that it is seen histopathologically as a lobular capillary hemangioma; whereas, clinically,

it presented as multiple lesions associated with multiple cherry angiomas.

REFERENCES

1. Michelson HE : *Granuloma pyogenicum: A clinical and histologic review of 29 cases.* *Arch Dermatol* 12:492-505, 1925.
2. Montgomery DW, Culver GD : *Granuloma pyogenicum.* *Arch Dermatol* 26:131-138, 1932.
3. Kerr DA : *Granuloma pyogenicum.* *Oral Surg* 4: 158-176, 1951.
4. Cooper PH, McAllister HA, Helwig EB : *Intravenous pyogenic granuloma: A study of 18 cases.* *Am J Surg Pathol* 3:221-228, 1979.
5. Ulbright TM, Santa Cruz DJ : *Intravenous pyogenic granuloma: Case report with ultrastructural findings.* *Cancer* 45:1646-1652, 1980.
6. Cooper PH, Helwig EB : *Intradermal and subcutaneous pyogenic granuloma: Study of 40 cases, abstracted.* *Lab Invest* 40:249, 1979.
7. Cooper PH, Mills SE : *Subcutaneous granuloma pyogenicum.* *Arch Dermatol* 118:30-33, 1982.
8. Zaynoun ST, Juljulian HH, Kurban AK : *Pyogenic granuloma with multiple satellites.* *Arch Dermatol* 109:689-691, 1974.
9. Zambrano A, Lopes-Barrantes V, Gonzales I : *Granuloma pyogenicum multiple lesions satellites.* *J Dermatol* 1:27-31, 1980.
10. Amerigo J, Gonzales-Campora R, Galera H, *et al* : *Recurrent pyogenic granuloma with multiple satellites: Clinicopathological and ultrastructural study.* *Dermatologica* 166:117-121, 1983.
11. Oscar Nappi, Wick MR : *Disseminated lobular capillary hemangioma (pyogenic granuloma).* *Am J Dermatopathol* 8:379-385, 1986.
12. Lee DS, Ko IJ, Cho BK, *et al* : *A case of subcutaneous granuloma pyogenicum.* *Kor J Dermatol* 24: 429-432, 1986.