Generalized Essential Telangiectasia: A Case Report and Review of the Literature

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Generalized essential telangiectasia (GET) is a well-established but seldom reported disorder. Patients with this condition develop widespread telangiectasias for no known reason. Although the condition can be cosmetically and psychologically devastating, it fortunately is not associated with other diseases or complications. Treatment can be difficult and expensive, but the therapeutic benefit of providing patients with a name and prognosis for their disease cannot be overemphasized.

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Case Report

A 32-year-old white woman was referred to our dermatology clinic because of a red and purple discoloration of her skin that started approximately 4 years previously. The dermatosis started on the distal lower extremities and steadily spread cephalad over the next few years. The patient's legs initially had distinct individual telangiectasias, but her legs later became red and then purple in color. The involved areas were essentially asymptomatic except for a mild stinging sensation when exposed to sunlight. There was no family history of this problem. Results of a complete review of systems were negative. The patient's medical and surgical history included hypothyroidism, type 2 diabetes mellitus, and gastric bypass surgery. She was taking levothyroxine, rosiglitazone, metformin, and a multivitamin, and no new medications were started when the telangiectasias first appeared.

On physical examination, the patient's lower extremities had a mottled purple discoloration due to fine confluent telangiectasias. Her upper extremities displayed patchy and reticulate erythema secondary to confluent telangiectasias (Figure). The anterior chest had numerous telangiectasias, but they were not confluent. Her upper back and face had a limited number of telangiectasias, but the lower back, buttocks, and abdomen were unaffected. There were no intraoral or ocular lesions. All involved areas fully blanched with diascopy.

A 3-mm punch biopsy from the right arm was obtained, and results showed dilated blood vessels in the upper dermis. A complete blood count with differential, liver enzymes, electrolytes, antinuclear antibody, rheumatoid factor, and hepatitis B and C serology were unremarkable. Based on the history, physical examination, and pathology and laboratory results, the patient was diagnosed with generalized essential telangiectasia (GET).

The patient was grateful to be given a diagnosis because she was finally able to answer the frequently asked question, "What is wrong with your skin?" A trial of tetracycline 500 mg twice a day was discontinued after one month because the patient believed it was making her condition worse. Prior to her visit, she had tried a self-tanning solution that did not provide a good cosmetic result. Laser surgery was not attempted because of financial limitations.

Comment

GET is a well-defined but infrequently reported disorder that was fully defined in the mid 20th century by Gentele and Lodin[1] and McGrae and Winkelmann.[2] In perhaps the largest study of patients with GET, the average age of GET onset was 38 years, and 72% of these patients were women.[2] Both inherited and sporadic cases have been reported.[2-4]

GET is a slowly progressing and persistent condition in which telangiectasias first appear on the distal lower extremities and then spread to the arms, trunk, and face.[2] The clinical presentation is varied and the skin findings have been described as diffuse, localized, plaquelike, retiform, mottled,

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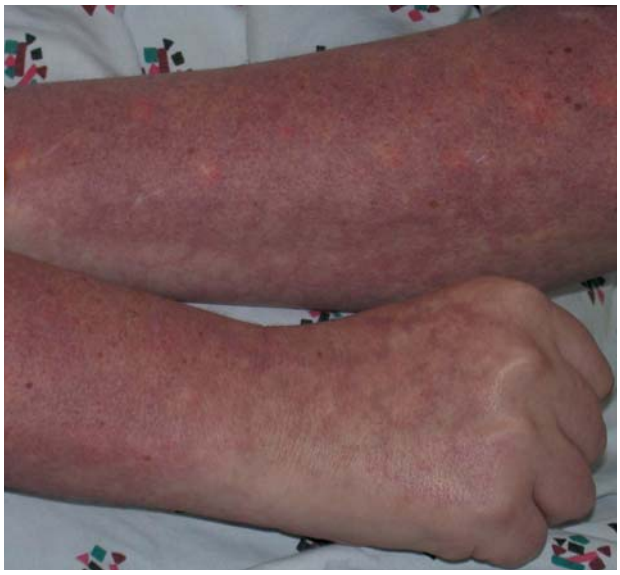

Patchy and reticulate erythema on the arms.

annular, macular, and grouped.[2,5] Confluence and development of purplish blue lesions, especially of the earliest distal lesions, have been described.[2] There are no epidermal or dermal abnormalities such as atrophy, purpura, or depigmentation, and varicosities are normally absent.[5]

Although a case of GET and gastrointestinal blood loss secondary to gastric antral vascular ectasia has been reported, there are generally no associated bleeding or systemic disorders.[5] Also, there is usually no ocular or oral involvement; however, cases of GET involving the conjunctiva have been described.[6,7] The involved skin is usually asymptomatic, but there can be tingling, burning, or numbness of affected areas.[2]

The cause of GET is unknown. Results of biopsy specimens taken from affected patients show dilated thin-walled vessels in the upper dermis with a normal overlying epidermis.[2,8] This finding may be secondary to hypostasis or structural defects in the vessel wall.[2,9] McGrae and Winkelmann[2] found the vessels in GET have no alkaline phosphatase activity via the diazo-coupling technique. Possible explanations for this finding include that the vessels are venous in origin or that the loss in alkaline phosphatase is related to the disease process.[2] Person and Longcope[3] performed biopsies on patients with GET and found the telangiectasias to have no estrogen or progesterone receptors. This supports the idea that endogenous substances known to produce vasodilatation (eg, estrogens, serotonin, adrenocorticoid steroids) are not implicated in this condition.[2]

Treatment of GET is difficult. Shelley[10,11] has successfully treated GET with tetracycline and acyclovir. One also can attempt applying camouflage make-up, self-tanning solutions, and sclerotherapy of larger vessels. Probably the only truly effective therapy for GET is laser surgery (eg, pulsed dye laser).[12]

Conclusion

GET is a well-established but uncommonly reported condition consisting of widespread persistent telangiectasias of unknown etiology. Although GET is a difficult and costly condition to treat, patients are likely to be grateful and relieved to be given a name for their disease and hear about its benign course.

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