Stasis Dermatitis May Present as Single Lesion

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SAN FRANCISCO — It is not uncommon for stasis dermatitis to present as a solitary lesion with no history of venous insufficiency, but it is uncommon for physicians to correctly diagnose it.

Thirty-three (7%) of 483 cases of stasis dermatitis diagnosed from a skin biopsy between 1992 and 2008 at the Cleveland Clinic presented as a solitary lesion. Of these 33 cases, clinical diagnoses mistook 11 cases for squamous cell carcinoma and 8 cases for basal cell carcinoma. Dr. Joshua Weaver and his associates reported in a poster presentation at the annual meeting of the American Society of Dermatopathology.

“Physicians also believed that three cases were scars, pyoderma gangrenosum, and another three were deemed consistent with irritated seborrheic keratosis. Other differential diagnoses offered by physicians were scars, pyoderma gangrenosum, actinic keratosis, Kaposi’s sarcoma, nevus, or a neoplasm, not otherwise specified.”

“We have revealed that there is an early form of stasis dermatitis presenting as a solitary lesion that clinically can look like a neoplasm,” said Dr. Weaver of the Cleveland Clinic. “It’s important to diagnose stasis dermatitis early so that you can begin treatment as early as possible” to prevent leg ulcers and an increased risk for developing squamous cell carcinoma.

The retrospective study found that the solitary-lesion cases occurred in the usual setting for stasis dermatitis—on the lower extremities of older adults (the cohort’s average age was 66 years) and in more females than males.

Detailed clinical descriptions in a subset of 25 cases reported a single erythematosus plaque on the lower portion of the leg as the most common presentation, affecting either leg in equal frequency. The lesions averaged 1.6 cm in size.

Out of 21 cases that physicians de-
scribed, 12 were called plaques, 5 were said to be papules, 3 were described as patchy, and 1 was called a nodule. Physicians noted some erythema in 12 cases, scaling in 3, and an erosive lesion in 1.

All cases demonstrated the classical morphologic picture of stasis dermatitis—variable acanthosis, mild spongiosis of the epidermis, and underlying proliferation of thick-walled blood vessels in the papillary dermis with hemosiderin and extravasation of red blood cells. In 27 (82%) of the 33 cases, spongiotic change in the epidermis was mild or absent and no spongiform vesicles were seen. Perakeratosis was present in 19 (58%) of cases, which correlated approximately half the time with the clinical impression of a scale.

Only five cases described the presence of stasis cutaneum. Dr. Weaver reported. All biopsies showed the characteristic lobular proliferation of thick-walled blood vessels in the papillary dermis. Nearly all cases evidenced signs of hemosiderosis, including extravasated erythrocytes, hemosiderin deposition, and hemosiderin. All had dermal fibrosis, but in variable proportions, he said. Additional biopsies performed at the time of the origi- nal diagnosis in six cases produced histologic findings similar to the original slides under hematoxylin and eosin stain. Special stains for microorgan- isms performed in nine cases found no fungal or bacterial organisms. An iron stain was performed in one case and was positive for hemosiderin with macrophages. Stasis dermatitis is a cutaneous manifestation and marker of increased venous pressure of the lower extremities. It usu- ally presents in middle-aged to elderly people as erythematous with slightly yellow- to-brown pigmented patches over the bilateral lower legs with or without con- spicuous varicose veins.

Most cases of stasis dermatitis are caused by insufficient deep venous system valves, promoting proper return of blood to the central circulation through the muscular pumping action of the lower legs. Prior thrombophlebitis or congenital fragility can cause venous valvular insufficiency.