White fibrous papulosisis of the neck: An underrecognized benign condition

Rachel White DO PGY-4, Carlos Ricotti MD, Francisco Kerdal MD
1 Dermatology Residency Program, Larkin Community Hospital
Palm Springs Campus, Hialeah, Florida

Case Presentation

A 71-year-old Caucasian female presented with a five-year history of a worsening rash on her posterior neck. The patient stated the rash started as a single raised bump and spread to include numerous bumps spanning the posterior and lateral sides of her neck. Patient denied associated symptoms including pain or pruritus and a complete review of systems was negative. Patient denied prior treatments. Past medical history included hypothyroidism. Patient denied family members with similar findings. Physical exam revealed numerous 1-3 mm discrete firm monomorphic white papules, some coalescing into plaques, and forming a cobblestone appearance distributed on posterior and lateral neck as seen below.

Pathology

4-mm punch biopsy of posterior neck showed slight thickening of collagen bundles with focal loss of elastic in the papillary dermis and normal appearing epidermis. There was a very sparse interstitial infiltrate of rare lymphocytes and histiocytes.

Discussion

White fibrous papulosisis of the neck (WFPN) is a chronic benign condition characterized by isolated or coalescing flesh-colored to white papules on posterior and lateral neck and are often asymptomatic. Histologically, WFPN reveals fibrosis of the papillary and upper reticular dermis. A similar condition, pseudoxanthoma elasticum-like papillary dermal elastolysis (PXE-PDE), is defined by yellow papules on the neck and other intertriginous areas and elastolysis histologically. Recent literature has combined the two conditions due to considerable overlap and renamed the entity, fibroelastic papulosisis of the neck (FEPN). FEPN is a benign condition most commonly occurring in elderly white females. The pathogenesis is unknown; however, hypotheses relate it to intrinsic skin aging, UV radiation, and free radical damage to elastic fibers. Its incidence is underestimated due to the benign, asymptomatic nature of the disease. It is important to distinguish this condition from pseudoxanthoma elasticum (PXE) which has an inadmissibly similar clinical presentation. PXE can be excluded by absence of cardiovascular and ocular changes, family history, and characteristic histologic findings of fragmented elastic fibers with calcium deposition. Treatment is aimed at cosmetic improvement; however, there are few reports on effective treatment. Case reports using topical steroids, topical tretinoin, and intralesional steroids have little to no effect. Laser therapy has proven to be the most effective treatment modality. Case reports using fractionated carbon dioxide laser and fractional 1550-nm erbium laser resulted in clinical improvement.

References