**Extramedullary Hematopoiesis: An Unusual Finding in Angiolymphoid Hyperplasia with Eosinophilia**

**Raj J. Thomas, B.S.(1), Nathan M. Johnson, M.D. (2), Douglas J. Grider, M.D. (2;3)**

(*1)Edward Via College of Osteopathic Medicine, Blacksburg, VA*

*(2)Department of Internal Medicine, Dermatology Division, Carilion Clinic & Virginia Tech Carilion School of Medicine, Roanoke, VA*

*(2;3)Department of Basic Science Education, Virginia Tech Carilion School of Medicine, Roanoke, VA*

[rajthomas001@gmail.com](mailto:rajthomas001@gmail.com)

Objective: To report that extramedullary hematopoiesis occurs in benign vascular lesions, like ALHE, and should not detract from making a diagnosis of ALHE. Further, extramedullary hematopoiesis in such settings is not associated with systemic disease, including hematologic processes.

ABSTRACT

Extramedullary hematopoiesis (EH) is the process of erythrocyte synthesis occurring outside the medulla of the bone marrow. During fetal development, EH is a normal physiological phenomenon, but it is considered pathological when present outside the neonatal period. A 13-year-old male from Sierra Leone presented with an isolated 1.5 x 1.0 x 1.0 cm nodule of the left preauricular cheek. The nodule had been present for several years and was slowly enlarging in a background of cystic acne for which he had received antibiotic therapy. The patient’s only laboratory abnormality was an absolute elevated eosinophil count. Excision revealed a tan-pink soft tissue vascular proliferation surfaced by a 1.2 x 0.4 cm red-brown finely granular, hair bearing skin ellipse. Histopathology showed a dermal and subcutaneous well circumscribed proliferation of blood vessels in a mucoid stroma with stellate or spindled cells and inflammatory cells that include eosinophils, lymphocytes, and plasma cells, confirming the diagnosis of angiolymphoid hyperplasia with eosinophilia (ALHE). Additionally, scattered small islands of hematopoiesis throughout the lesion were noted. To the authors’ knowledge, this is the first case of EH in the setting of ALHE to be reported.

Key words: extramedullary hematopoiesis, angiolymphoid hyperplasia with eosinophilia, epithelioid hemangioma