

BROOKE GRILL, MAPLE LANDVOIGT, DINA SCHAPER, Dept of Clinical Sciences, West Virginia School of Osteopathic Medicine, Lewisburg, WV, 24901, and JODI FLANDERS, Medical Missions and Imaging, PC, Owosso, MI, 48867. Cutaneous leishmaniasis case report with possible link to nutrition.

Leishmaniasis is uncommon in the United States but endemic in impoverished areas with high sandfly populations. In addition, affected areas often lack balanced diets, raising suspicion of a relationship between parasite susceptibility and nutrition. During a medical service trip to the Sacred Valley region of Peru, a young 7-year-old boy presented with a rash, fatigue, and lack of appetite. He also had a history of being bitten by insects while playing outside. He was hospitalized eight weeks prior and diagnosed with cutaneous leishmaniasis (subtype unknown) based on deep tissue biopsy and culture by local doctors. He was subsequently treated for a total of ten days with IV sodium stibogluconate. On presenting to our medical clinic, his diagnosis was verified through observation of a one-inch volcanic appearance with rolled edges and pink ulceration located on his forearm. There was evidence of scabbing and the patient was advised to continue follow-up with his local physicians. It was also noted that the child's uncle had a similar lesion on his nose, likely being mucocutaneous leishmaniasis. The prevalence of leishmaniasis within this family and association with nutritional deficiencies of the area, raises the possibility of nutrition as a modifying risk factor in this infection. Others have found that high protein diets can increase resistance and resilience to parasites. Nutritional education and intervention to increase dietary protein has the potential to be a preventive, cost-effective, and realistic means to help reduce leishmaniasis infections in communities with a relatively low protein intake.