BRIEF ARTICLES

Spontaneous Resolution of Asymptomatic Papules on the Face of a Two-Year-Old

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ABSTRACT

A nine-month old male infant presented with multiple, asymptomatic, and yellow-to-pink lesions on his face. Physical exam revealed multiple 2-5 mm reddish brown papules on the forehead, nose, cheeks, and chin Laboratory findings, developmental milestones, and ophthalmology exam were within normal limits, and biopsy was consistent with benign cephalic histiocytosis. Lesions spontaneously involuted at age 18 months without treatment, and by age two, the lesions had fully resolved without sequelae.

REPORT OF A CASE

A nine-month old male infant presented with multiple, asymptomatic lesions on his face. Two months prior to presentation, his mom noticed a single yellow-to-pink spot on his forehead. Over the next several weeks, multiple similar appearing lesions developed, eventually covering most the patient's face. The patient was progressing normally and up-to-date on all developmental milestones. Physical exam revealed multiple 2-5 mm reddish brown papules on the forehead, nose, cheeks, and chin (Figure 1). The patient was referred to ophthalmology for eye exam, which revealed no abnormalities. Complete blood count and lipid profiles were within normal limits. The differential diagnosis included benign cephalic histiocytosis, multiple juvenile xanthogranulomas, eruptive xanthomas, and urticaria pigmentosa. Biopsy was performed at an outside facility, which was consistent with benign cephalic histiocytosis. The patient was followed clinically, and at age 18 months, the lesions began to spontaneously involute. At two years of age, the lesions had fully resolved without sequalae.

Benign cephalic histiocytosis (BCH) is considered one of the rare, self-resolving non-Langerhans cell histiocytoses that occurs in infants and young children. It is characterized by an abrupt onset of multiple yellow-to-brown papules, primarily occurring on the head and neck regions, sparing distal extremities, mucous membranes, and internal organs.[1-4] The disease course is benign without any associated developmental abnormalities or malformations. Diabetes insipidus was reported in few cases, but a clear association with BCH has not been identified. All cases resolve spontaneously over months to years without residual scarring.[4]

Typical lesions are described as small, round to oval, and pink to brownish-yellow papules. Although the name BCH was coined based on its classic presentation on the cephalic region, some reports describe the initial appearance of lesions on other parts of the body, including the trunk.[2,4] Histopathologically, there are sheets of foamy histiocytes with oval to reniform nuclei and abundant pale to slightly amphiphilic cytoplasm lacking cytoplasmic lipids. The infiltrate, which may also contain scattered lymphocytes and eosinophils, is present in the superficial to mid-reticular dermis in close apposition to a mostly effaced overlying epidermis.[3] Cells are characteristically positive for CD68, factor XIIIa, and CD11b [OKM1] on immunohistochemical staining, however, these findings are not absolutely diagnostic of BCH. Cells are typically negative for CD1a, S100, and CD207 and devoid of Bierbeck granules.[2]

The differential diagnosis includes juvenile xanthogranulomas (JXG), generalized eruptive histiocytomas, and urticaria pigmentosa.[3] BCH is considered to belong to the spectrum of non-Langerhans cell histiocytosis, which share overlapping clinical, histologic and ultrastructural characteristics.[4]

Key Words: Histiocytic disorders; Lumps/Bumps; Benign cephalic histiocytosis; benign histiocytosis; histiocytoses; spontaneous resolution; multiple papules; cephalic papules

Conflict of Interest Disclosures: None

Funding: None

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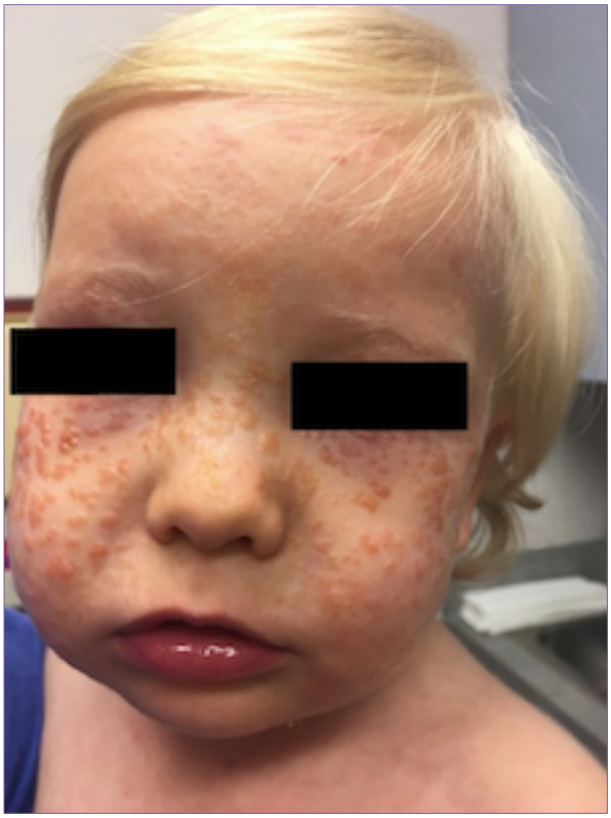
Figure 1. Nine-month old male infant with multiple, asymptomatic 2-5 mm reddish brown papules on the forehead, nose, cheeks, and chin, which eventually resolved without scarring.



References:

1. Gianotti F, Caputo R, Ermacora E, Gianni E. Benign cephalic histiocytosis. *Archives of dermatology.* 1986;122(9):1038-1043.
2. Jih DM, Salcedo SL, Jaworsky C. Benign cephalic histiocytosis: a case report and review. *Journal of the American Academy of Dermatology.* 2002;47(6):908-913.
3. Lange M, Izycka-Swieszewska E, Michajlowski I, Baranska-Rybak W. Benign cephalic histiocytosis. *Cutis.* 2015;95(6):E15-17.
4. Polat Ekinci A, Buyukbabani N, Baykal C. Novel Clinical Observations on Benign Cephalic Histiocytosis in a Large Series. *Pediatric dermatology.* 2017;34(4):392-397.