- 7. Guilbert TW, MD, Mauger DT, Allen DB, et al. Growth of preschool children at high risk for asthma 2 years after discontinuation of fluticasone. J Allergy Clin Immunol. 2011;128:956-63.
- Bacharier LB, Phillips BR, Zeiger RS, Szefler SJ, Martinez FD, Lemanske RF, et al. Episodic use of an inhaled corticosteroid or leukotriene receptor antagonist in preschool children with moderate-to-severe intermittent wheezing. J Allergy Clin Immunol. 2008;122:1127-35.
- 9. Guilbert TW, Morgan WJ, Zeiger RS, Mauger DT, Bohemer SJ, Szefler SI, et al. Long-term inhaled corticosteroids in preschool children at high risk for asthma. N Engl J Med. 2006;354:1985-97.
- 10. Jartti T, Lehtinen P, Vanto T, et al. Evaluation of the efficacy of prednisolone in early wheezing induced by rhinovirus or respiratory syncytial virus. Pediatr Infect Dis J. 2006:25:482-8.
- 11. Lemanske RF Jr, Jackson DJ, Gangnon RE, Evans MD, Li Z, Shult PA, et al. Rhinovirus illnesses during infancy predict subsequent childhood wheezing. J Allergy Clin Immunol. 2005;116:571-7.
- 12. Lehtinen P, Ruohola A, Vanto T, Vuorinen T, Ruuskanen O, Jartti T. Prednisolone reduces recurrent wheezing after a first wheezing episode associated with rhinovirus infection or eczema. J Allergy Clin Immunol. 2007;119:570-5.
- 13. Jartti T. Lee WM. Pappas T. Evans M. Lemanske RF Jr. Gern JE. Serial viral infections in infants with recurrent respiratory illnesses. Eur Respir J. 2008:32:314-20.
- 14. Panickar J, Lakhanpaul M, Lambert PC, Kenia P, Stephenson T, Smyth A, et al. Oral prednisolone for preschool children with acute virus-induced wheezing. N Engl J Med. 2009;360:329-38.
- 15. Jartti T, Kuusipalo H, Vuorinen T, et al. Allergic sensitization is associated with rhinovirus-, but not other virus-, induced wheezing in children. Pediatr Allergy Immunol. 2010:21:1008-14.
- 16. Jartti T, Korppi M. Rhinovirus-induced bronchiolitis and asthma development. Pediatr Allergy Immunol. 2011;22:350-5.

pustular eruption on her chin (Figure 1). A similar eruption was triggered by the same antibiotic combination 3 years ago after surgery for acute appendicitis. She also has irritable bowel syndrome and vasovagal reactions for many months. She has been on oral contraceptives for many years. She presented a positive family history for asthma and rhinitis. Physical examination was otherwise normal with an axillary's temperature of 36.4°C. She was diagnosed as having recurrent ALEP caused by the combination of amoxicillin-clavulanic acid, which was immediately discontinued. Oral fexofenadine 180mg/ day and prednisone 20mg /twice a day were instituted with complete resolution of the pustulous eruption in 3 days. The following laboratory work-up was normal or negative: CBC, differential, platelets, ESR, CRP, aspartate aminotransferase and alanine aminotransferase (AST and ALT), serum immunoglobulins (IgG, IgA, IgM, IgE), complement (C3, C4 and CH50), anti-HIV-1&2, and lymphocyte subpopulations (CD3+, CD19+, CD4+, CD8+, CD4+/CD8+ ratio, CD56+, CD16+). Gamma GT was elevated (67 U/L with a normal value lower than 40 U/L), and a positive ANA of 1:320 with a nuclear fine dense pattern was detected but it was negative for all the other pertinent cell structures. These were considered as non specific laboratory changes.

## **Acute localized exanthematous** pustulosis (ALEP) caused by the association amoxicillin-clavulanic acid

Braz J Allergy Immunol. 2013;1(3):182-3.

Acute localized exanthematous pustulosis (ALEP) is an atypical variant of the rare drug reaction acute generalized exanthematous pustulosis (AGEP).1 It is an acute and localized aseptic subcorneal pustular eruption caused by medicines.<sup>2</sup> It is usually present 24 hours after exposure and in about 80% of the reported cases it is caused by antibiotics, especially beta-lactam agents. <sup>3</sup> The diagnosis is clinical (cause-effect, temporal association) and the condition is reversible in about 2 weeks after discontinuation of the responsible drug and treatment with systemic corticosteroid.<sup>4-5</sup> A few cases of ALEP attributed to the oral combination amoxicillinclavulanic acid have been described.6-7

Female patient, age 26 years, Caucasian, lawyer, treated with the oral combination of amoxicillin (875 mg)clavulanic acid (125 mg), every 12 hours, for an inguinocrural infection. After 24 hours of this treatment, she presented with dizziness and a painful and pruritic



Figure 1 -Acute localized exanthematous pustulosis (ALEP) on thechin caused by the combination amoxicillin-clavulanic

## Mario Geller, MD, MACP, FAAAAI, FACAAI

Active Member of the Academy of Medicine of Rio de Janeiro, Brazil Geller Allergy and Immunology Clinic E-mail: gellerm@attglobal.net

No conflicts of interest.

## **REFERENCES**

- 1. Vickers JL, Matherne RJ, Mainous EG, Kelly BC. Acute localized exanthematous pustulosis: a cutaneous drug reaction in a dental setting. J Am Dent Assoc. 2008;139(9):1200-3.
- 2. Prange B, Marini A, Kalke A, Hodzic-Avdagic N, Ruzicka T, Hengge UR. Acute localized exanthematous pustulosis (ALEP). J Dtsch Dermatol Ges. 2005;3(3):210-2.
- 3. Roujeau JC, Bioulac-Sage P, Bourseau C, Guillaume JC, Bernard P, Lok C, Plantin P, Claudy A, Delavierre C, Vaillant L, et al. Acute generalized exanthematous pustulosis. Analysis of 63 cases. Arch Dermatol. 1991;127(9):1333-8.
- 4. Belda Junior W, Ferolla AC. Acute generalized exanthematous pustulosis (AGEP). Case report. Rev Inst Med Trop Sao Paulo. 2005;47(3):171-6.
- 5. Sim HS, Seol JE, Chun JS, Seo JK, Lee D, Sung HS. Acute localized exanthematous pustulosis on the face. Ann Dermatol. 2011;23 (Suppl 3):S368-70.
- 6. Betto P, Germi L, Bonoldi E, Bertazzoni M. Int J Dermatol. 2008;47(3):295-6.
- 7. Ozkaya-Parlakay A, Azkur D, Kara A, Yildiz Y, Orhan D, Cengiz AB, Ersoy-Evans S. Localized acute generalized exanthematous pustulosis with amoxicillin and clavulanic acid. Turk J Pediatr. 2011;53(2):229-32.