Photo Quiz: A 2-year-old female with fever and rash

Michael E. Watson Jr.
*Washington University School of Medicine in St. Louis*

Gregory A. Storch
*Washington University School of Medicine in St. Louis*

W. Michael Dunne Jr.
*Washington University School of Medicine in St. Louis*

Carey-Ann D. Burnham
*Washington University School of Medicine in St. Louis*

Follow this and additional works at: https://digitalcommons.wustl.edu/open_access_pubs

**Recommended Citation**

https://digitalcommons.wustl.edu/open_access_pubs/2354

This Open Access Publication is brought to you for free and open access by Digital Commons@Becker. It has been accepted for inclusion in Open Access Publications by an authorized administrator of Digital Commons@Becker. For more information, please contact vanam@wustl.edu.
A 2-Year-Old Female with Fever and Rash

Michael E. Watson Jr., Gregory A. Storch, W. Michael Dunne Jr. and Carey-Ann D. Burnham


Updated information and services can be found at:
http://jcm.asm.org/content/49/7/2389

CONTENT ALERTS

These include:
Receive: RSS Feeds, eTOCs, free email alerts (when new articles cite this article), more»

Information about commercial reprint orders: http://journals.asm.org/site/misc/reprints.xhtml
To subscribe to another ASM Journal go to: http://journals.asm.org/site/subscriptions/
A previously healthy 2-year-old Caucasian female from southeast Missouri presented to the emergency department of St. Louis Children’s Hospital in June 2010 with a week-long fever. Her history included the removal of a small tick engorged with blood several days prior to fever onset. She exhibited high fevers of up to 104°F, with associated rhinorrhea, a mild cough, and episodes of emesis and diarrhea causing moderate dehydration. After several days at home, she was admitted to the hospital, where she was treated with ceftriaxone and azithromycin for otitis media without overall improvement. She developed an erythematous, maculopapular rash that blanched with pressure and that initially began on her cheeks and then spread down her neck to her trunk and extremities, sparing her palms and soles; no petechiae were observed. A complete blood count (CBC) revealed a low-normal white blood cell (WBC) count of 4.9 × 10^9 cells/liter, a (low) hemoglobin concentration of 10.9 g/dl, and a low platelet count of 102 × 10^9 cells/liter. Her serum metabolic panel indicated hyponatremia (133 mmol of sodium/liter) with mildly elevated liver transaminase levels (aspartate transaminase [AST], 56 U/liter; alanine transaminase [ALT], 48 U/liter). Routine bacterial cultures of blood and urine were negative for growth. After further evaluation, a lumbar puncture was performed, with analysis of cerebrospinal fluid (CSF) showing a total cell count of 95 × 10^6 cells/liter, including 84% lymphocytes and 13% monocytes; the CSF glucose level was 52 mg/dl, and the CSF protein level was 53 mg/dl. Geimsa staining of the CSF specimen was performed as part of her evaluation and revealed inclusion bodies present in the cytoplasm of monocytes (Fig. 1). A PCR assay of whole blood was performed and confirmed the diagnosis.

Michael E. Watson, Jr.
Gregory A. Storch
Department of Pediatrics
Washington University School of Medicine
St. Louis, Missouri 63110

W. Michael Dunne, Jr.
Department of Pathology & Immunology
Washington University School of Medicine
St. Louis, Missouri 63110

Carey-Ann D. Burnham*
Departments of Pediatrics and Pathology & Immunology
Washington University School of Medicine
660 S. Euclid Ave., Box 8116
St. Louis, Missouri 63110

*Phone: (314) 747-5185
Fax: (314) 454-2274
E-mail: Burnham_c@kids.wustl.edu

Fig. 1. Wright-Geimsa stain of cerebral spinal fluid from the patient, showing cytoplasmic inclusion bodies within monocytes (original magnification, ×1,000).