

Clinical Image

Depocyt, a Potential Confusing Factor for Cerebrospinal Fluid Examination

George Girgis¹, David Hart¹, Patrick J. Kiel² and Jiehao Zhou^{1*}

¹Department of Pathology and Laboratory Medicine, Indiana University Health and Indiana University, USA

²Department of Hematology, Indiana University Health and Indiana University, USA

*Corresponding author: Jiehao Zhou, Department of Pathology and Laboratory Medicine, Indiana University Health and Indiana University, 350 W.11th Street, Room 5036, Indianapolis, IN 46202-5200, USA

Received: July 31, 2014; Accepted: Aug 01, 2014;
Published: Aug 04, 2014

The Patient is a 68-year-old female diagnosed of diffuse large B cell lymphoma with leptomeningeal involvement. Automated cerebrospinal fluid (CSF) evaluation by hematology analyzer was flagged due to abnormal cellular intervention. Wet mount microscopic evaluation (A) showed few inflammatory cells (empty arrows) along with non-nucleated particles (filled arrows). These particles measured 5-20 μm and were round, homogeneous with occasional eccentric vacuole. These particles were not identified on



the stained cytosine. Further investigation showed that the patient had received intrathecal cytarabine injection in the form of Depocyt. Microscopic examination of Depocyt (B) demonstrated these particles were Depocyt particles. Depocyt is an injectable suspension of cytarabine which is encapsulated into lipid-based particles and is directly administrated into the CSF of patients with central nervous system lymphoma. The Depocyte particles that appeared on the wet preparation can be confused with white blood cells, and should be excluded from the actual total cell count.