**BLOOD RESEARCH** 

Volume 53 · Number 2 · June 2018 https://doi.org/10.5045/br.2018.53.2.101

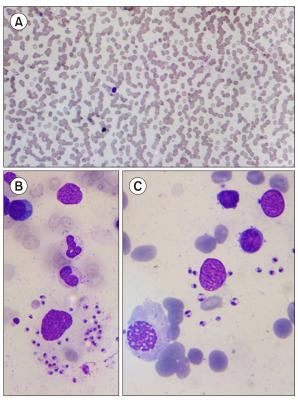
## The ubiquitous parasite: leishmaniasis in an elderly man

Mili Jain<sup>1</sup>, Ashutosh Kumar<sup>1</sup>, Shailendra Prasad Verma<sup>2</sup>, Anil Kumar Tripathi<sup>2</sup>

Departments of <sup>1</sup>Pathology and <sup>2</sup>Clinical Hematology, King George's Medical University, Uttar Pradesh, India

Received on July 1, 2017; Revised on July 7, 2017; Accepted on August 3, 2017

Correspondence to Mili Jain, M.D., Department of Pathology, King George's Medical University, Lucknow, Uttar Pradesh 226003, India E-mail: milijain786@gmail.com, milijain@kgmcindia.edu



A 70-year-old man from Lucknow, India, presented with epistaxis, pallor, and splenomegaly for 3 months. He had no history of fever, anorexia, jaundice, and weight loss. His complete blood count revealed pancytopenia, with a hemoglobin level of 80 g/L; white blood cell count of  $2.5 \times 10^9 \text{/L}$ , with predominance of lymphocytes (65%); and platelet count of  $80 \times 10^9 \text{/L}$ . Peripheral smear examination revealed Rouleaux formation (A; Leishman stain,  $\times 200$ ). His serum protein level was 9.5 g/dL, with a reversed albumin/globulin ratio (1:2.8). His renal function, blood-sugar level, and liver function were unremarkable, except an elevated alkaline phosphatase level (780 IU/L). Stool examination for occult blood and viral markers (HIV, hepatitis **B** and **C**) was negative. Bone marrow examination revealed hypercellular differentiation with adequate megakaryocytes and increased lymphocytes (25%) and plasma cells (15%). The smears also showed intra- and extracellular amastigote forms (with nucleus and kinetoplast) of Leishmania donovani (**B**, **C**; Leishman stain,  $\times 630$ ).

Visceral leishmaniasis (VL) is an endemic infection in certain parts of India. The transmission is anthroponotic, with sand fly *Phlebotomus argentipes* as the vector. VL classically presents as fever, splenomegaly, and pancytopenia. Atypical presentation without fever in a non-endemic urban city, such as in this case, is rare.