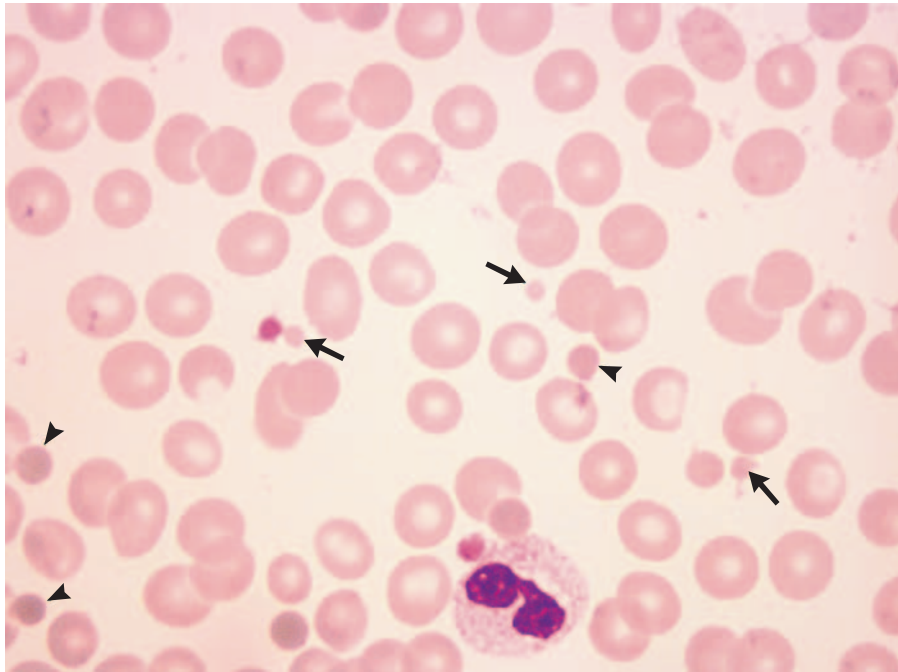


What is the likely cause of the abnormality shown here?

IMAGES IN CLINICAL MEDICINE

Spurious Platelet Count



Michele Siegenthaler, M.D.
Olivier Spertini, M.D.

Centre Hospitalier Universitaire Vaudois
1011 Lausanne, Switzerland

A PREVIOUSLY HEALTHY 48-YEAR-OLD MAN WAS ADMITTED FOR SEVERE burns involving his face, thorax, and upper and lower limbs (45 percent of body-surface area) associated with an inhalation injury. The hemoglobin level was 12.3 g per deciliter, the hematocrit 37 percent, the mean corpuscular volume $93 \mu\text{m}^3$, the red-cell-distribution width 15.8 percent, and the white-cell count 7400 per cubic millimeter. The platelet count was 274,000 per cubic millimeter when measured with the use of an automated system. Because staining of a peripheral-blood smear with May-Grünwald-Giemsa showed numerous spherocytes (arrowheads) and microspherocytes (arrows) resulting from heat-induced damage to red-cell membranes, platelets were recounted manually and the number was found to be much lower (85,000 per cubic millimeter). The spuriously normal platelet count obtained by means of the automated system was due to the misidentification of microspherocytes as platelets. Clinicians should consider this possibility when dealing with patients with recent burns.

After a protracted hospital stay, the patient required limb amputation and reconstructive surgery.

Copyright © 2006 Massachusetts Medical Society.

Web-only Images in Clinical Medicine are published every week in the *Journal*. They are listed (with e page numbers) in the table of contents on the cover of the printed *Journal* and can be seen at www.nejm.org.