

## Illustration

### \*Corresponding author

**Takeshi Saraya, MD, PhD**  
Assistant Professor  
Department of Respiratory Medicine  
Kyorin University School of Medicine  
6-20-2 Shinkawa, Mitaka City  
Tokyo 181-8611, Japan  
Tel. +81 (0)422 44 0671  
Fax: +81 (0)422 44 0671  
E-mail: [sara@yd5.so-net.ne.jp](mailto:sara@yd5.so-net.ne.jp)

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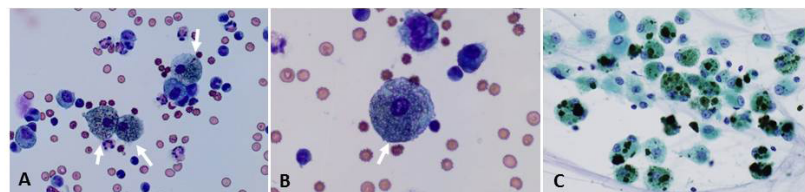
# Rapid Diagnosis of Hemosiderin-Laden Macrophages With Diff-Quick Stain

**Takeshi Saraya, MD, PhD\***; **Manabu Ishida, MD**; **Shoko Wada, MD**; **Masachika Fujiwara, MD, PhD**; **Hajime Takizawa, MD, PhD**

Department of Respiratory Medicine, Kyorin University School of Medicine, 6-20-2 Shinkawa, Mitaka City, Tokyo 181-8611, Japan

**KEYWORDS:** Hemosiderin-laden macrophages; Alveolar hemorrhage; Rapid diagnosis; Diff-quick stain; Hemosiderin.

A 77-year-old healthy woman was referred to our hospital with sudden hemoptysis. Chest X-ray showed moderate consolidation in the right upper lung fields. On hospital day 3, urgent bronchoscopy was performed and sequential Bronchoalveolar lavage (BAL) fluid obtained from segment 2 of the right lung was progressively more hemorrhagic. Of note, cytological evaluation with rapid Diff-quick stain demonstrated the presence of numerous large Alveolar Macrophages (AMs) engulfing yellow-colored material (Figures 1A and 1B; arrows), so-called Hemosiderin-laden macrophages together with abundant red blood cells in the background. On Papanicolaou staining, intracytoplasmic hemosiderin accumulation in the AMs was seen as faint, brown-colored, dense deposits (Figure 1C). She was thus tentatively diagnosed with idiopathic alveolar hemorrhage. Hemosiderin-laden macrophages are a hallmark of alveolar hemorrhage, which usually takes a few days to diagnose,<sup>1,2</sup> but this case clearly demonstrated that these cells can be seen even in a rapid diagnostic test with Diff-quick stain.



**Figure 1:** A and B. Cytological evaluation with rapid Diff-quick stain demonstrated the presence of numerous large Alveolar Macrophages (AMs) engulfing yellow-colored material. C. On Papanicolaou staining, intracytoplasmic hemosiderin accumulation in the AMs was seen as faint, brown-colored, dense deposits.

### CONFLICTS OF INTEREST

The authors declare no conflict of interest associated with this manuscript.

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