Yellow Broncho-alveolar Lavage Fluid in Eosinophilic Pneumonia

Daijiro Nabeya, Takeshi Kinjo, Kazuya Miyagi and Jiro Fujita

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A 34-year-old man with bronchial asthma was introduced to our clinic because his blood tests showed a white blood cell count of 25,200/μL with a differential of 70% eosinophils, and chest computed tomography revealed non-segmental multi-lobar consolidation. Bronchoscopy was performed and yellow broncho-alveolar lavage fluid (BALF) was collected (Picture 1). The supernatant of BALF was still yellow (Picture 2). The total cell count (TCC) was 110×10^5/mL and the cell differentiation of BALF showed a significant elevation of eosinophils (98%). As a result, a diagnosis of idiopathic chronic eosinophilic pneumonia (EP) was made. Eosinophil cationic protein (ECP), a representative eosinophil-derived protein, in BALF was also significantly elevated (105 μg/L).

It is presumed that a high protein concentration caused by elevated TCC results in the observed yellow color. Since extremely high TCC and ECP levels are observed in some EP cases (1, 2), yellow BALF is sometimes seen in EP. Although yellow BALF is not a specific finding, it may nevertheless provide an important diagnostic clue for identifying EP.

The authors state that they have no Conflict of Interest (COI).

References

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