Case report





mechanically ventilated for > 3 days post-operative course

- non-smoker
- no immunosuppression
- no antibiotics

suspected of VAP



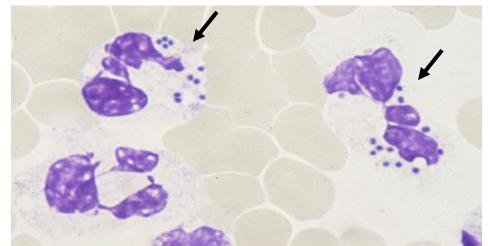
Recovered volume: 80 ml

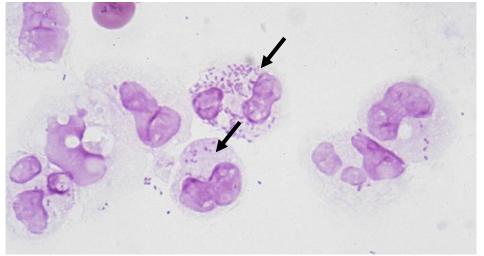
Total cell count: 1,720,000 /ml

Am	2.2%	SEC 1/500
	,,	3EC 17300
Lym	3.8%	BEC 2/500
PMN	94.0%	
Eos	0.0%	
Mc	0.0%	



May-Grünwald Giemsa





Gram



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Eos	0.0%	ICO 8%
Mc	0.0%	



A certain cut-of value is used for intracellular micro-organisms in order to diagnose a ventilator-associated pneumonia (VAP).

This cut-of value is:

a. ≥ 2% ICO

b. ≥ 5% ICO

c. < 2% ICO

d. < 5% ICO





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Ventilator-Associated Pneumonia VAP



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PMN	94.0%
Eos	0.0%
Mc	0.0%

SEC 1/500

BEC 2/500

ICO 8%

Cut-off = 2%



To confirm the diagnosis ventilatorassociated pneumonia infected cells can be used. These ICOs can be detected by certain stains.

These stains include:

- a. Gram-stain
- b. May-Grunwald Giemsa stain
- c. Acridine Orange
- d. all of the above





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Ventilator-Associated Pneumonia VAP

Cut-off = 2%

Culture: *Staphylococcus aureus* ≥10⁵ CFU/ml



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94.0% **PMN**

0.0% Eos

0.0%

BEC 2/500

ICO 8%

Ventilator-**Associated** Pneumonia VAP

Cut-off = 2%

Cut-off $= 10^4$

Culture: Staphylococcus aureus ≥10⁵ CFU/ml



PhD theses dealing with BAL

