WBC - White blood cell counts during an acute outbreak of actinobacillosis

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The results indicate that *WBC and differential counts is efficient in detecting disease at an early phase of an infection* also in pigs.

BACKGROUND

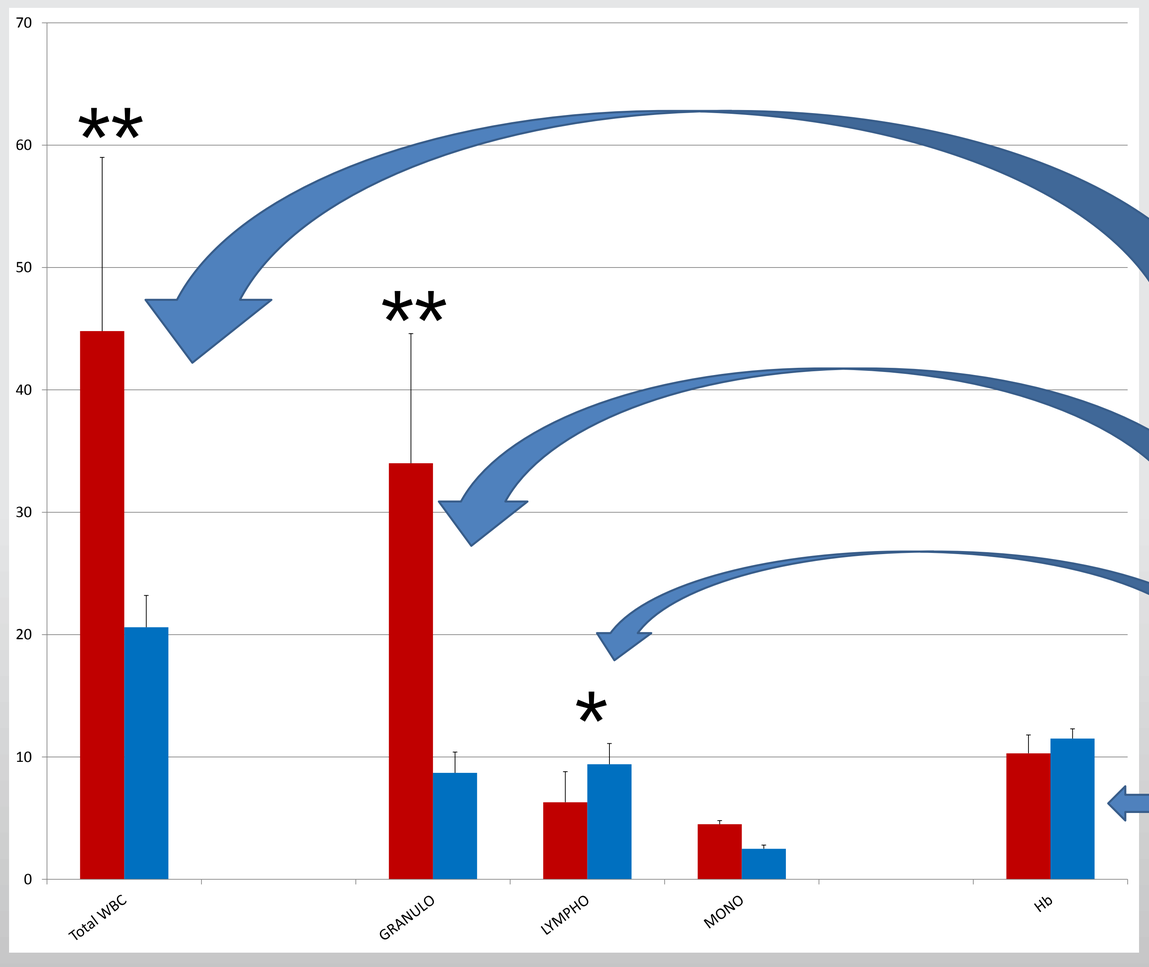
White blood cell (**WBC**) counts and defining subpopulations is a **classic way to reveal infections** that only rarely have been used in pigs due to cost. Recently, automatic WBC-analysers have been introduced to veterinary medicine - reducing price and cutting time when defining subpopulations.

We tested a blood-analyser (EXIGO, Boule, Stockholm, Sweden) in pigs from a fattening herd severely affected by ***Actinobacillus pleuropneumoni* serotype 2**, confirmed by serology and by isolation of the bacteria. At slaughter, 24 ± 5% of the pigs were registered with pleuritis

METHODS AND RESULTS

A fattening herd with nine units that every fortnight received 300 growers aged 85 days from a piglet producer with 600 sows. Both herds effectuated strict age segregated rearing.

A sudden onset of **acute respiratory disease** was recorded in a unit **23 days after arrival**. At that day, blood was collected from 6 pigs with clinical signs of disease (feed refusal and forced breathing, coughing) and from 6 apparently healthy pigs.



All pigs were **seronegative to *A. pleuropneumoniae***

WBC counts in the **healthy pigs** were **normal**.

Leukocytosis with a **pronounced increase of neutrophils** was seen in pigs with ***acute signs of respiratory disease***, on behalf of a significant **decrease of lymphocytes**

Hb-values normal in both groups

Figure. *Day 23 after arrival* ***BLUE = healthy pigs***, ***RED = pigs with acute actinobacilolosis, 1st day***
(Total and differential counts of WBC; 10^9 per ml blood . Hb; g per 100 ml blood)