

Inflammation

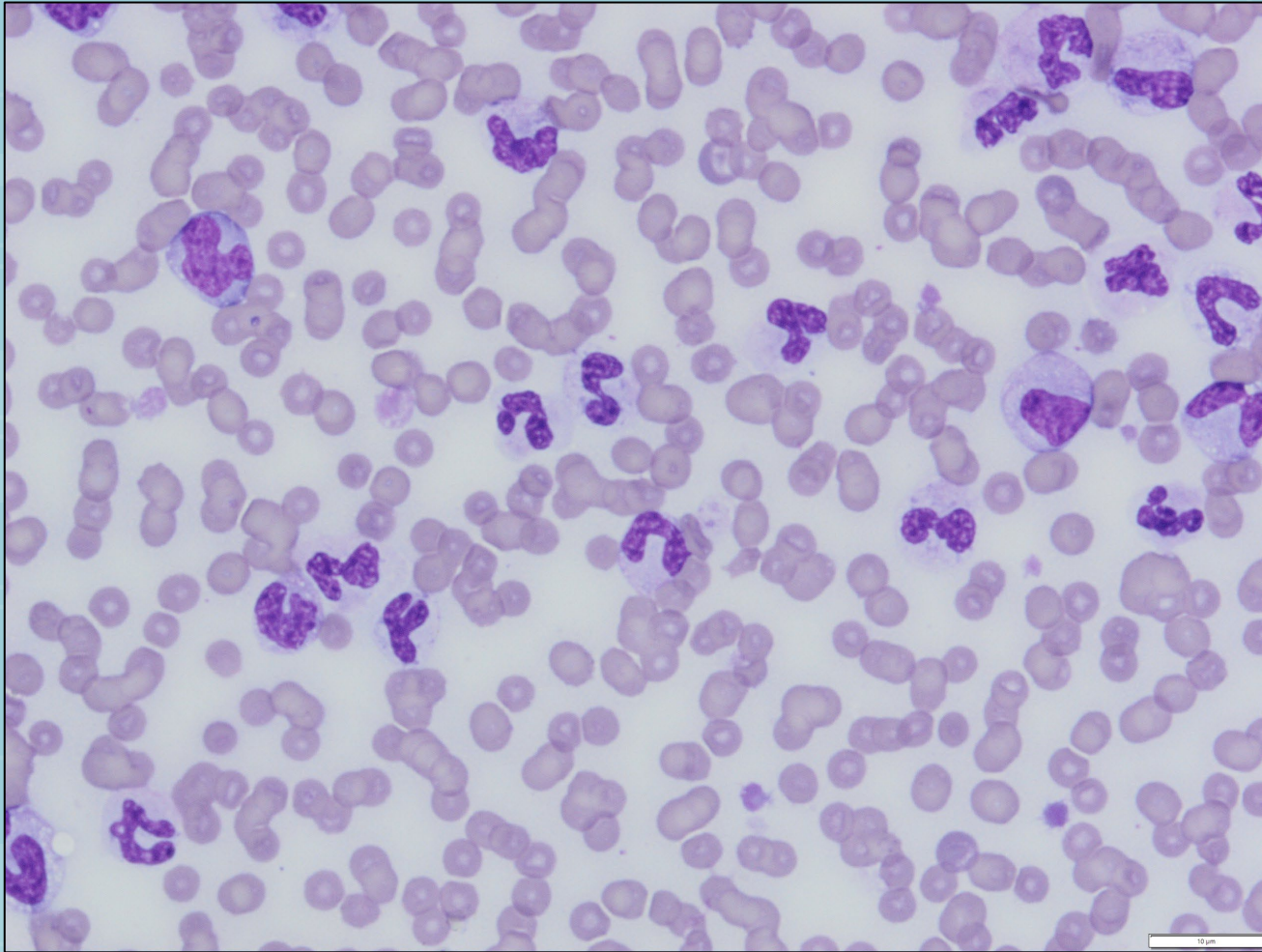
Case Study



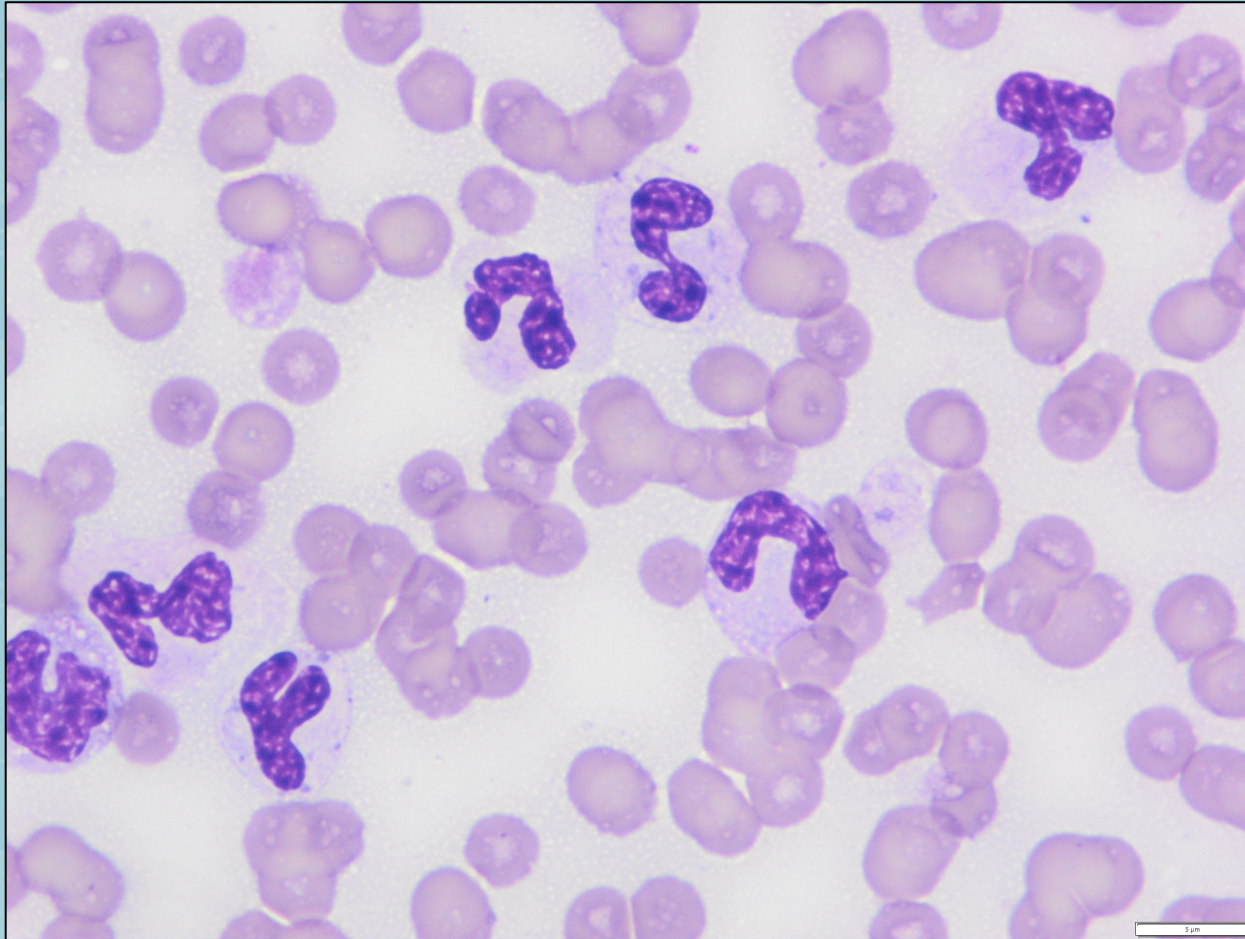
Here's a case example where severe inflammation was present. The case is a 7-year old intact female Poodle that presented for lethargy and a vaginal discharge. The clinical diagnosis was pyometra, and these are the CBC results (blood drawn prior to surgery).

	Patient sample	Reference interval
Hct%	29%	41.8 – 61.5
WBC	76,000/uL	4.9 – 16.9 x 10 ³ /uL
Segmented neutrophils	42,900/uL	2.0 – 12.3 x 10 ³ /uL
Band neutrophils	23,400/uL	0 – 0.45 x 10 ³ /uL
Lymphocytes	3,460/uL	0.7 – 4.5 x 10 ³ /uL
Monocytes	6,240/uL	0 – 1.47 x 10 ³ /uL
Platelets	120,000/uL	140 – 610 x 10 ³ /uL

Blood smear at 50x magnification. Many segmented neutrophils and bands are present, and the nuclei appear “puffy.”



Blood smear at 100x magnification. Both segmented neutrophils and bands are present, and the cells show moderate toxic change. The nuclei appear “puffy”, some of the cells contain small Dohle bodies, the cytoplasm is more blue/grey than a normal neutrophil cytoplasm and some foamy vacuolation is present.



The findings of a severe neutrophilia with a significant left shift and toxic change are indicative of a response to severe, ongoing inflammation.