

# Thrombocytosis in brachycephalic dogs with brachycephalic obstructive airway syndrome

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## Electronic Supplementary Material (ESM)

Table S1. Haematological parameters of brachycephalic dogs with various grades of brachycephalic obstructive airway syndrome (BOAS) and healthy non-brachycephalic dogs (control)

Table S2. White blood cell count and white blood cell differential count of brachycephalic dogs with various grades of brachycephalic obstructive airway syndrome (BOAS) and healthy non-brachycephalic dogs (control)

Table S3. Biochemical parameters of brachycephalic dogs with various grades of brachycephalic obstructive airway syndrome (BOAS) and healthy non-brachycephalic dogs (control)

Table S1. Haematological parameters of brachycephalic dogs with various grades of brachycephalic obstructive airway syndrome (BOAS) and healthy non-brachycephalic dogs (control)

Parameter	Control (n = 41)	Grade 1 (n = 17)	Grade 2 (n = 42)	Grade 3 (n = 47)	All patients (n = 106)	REF
RBC ( $10^{12}/l$ )						
Mean ± SD	7.1 ± 0.7	7.2 ± 0.9	7.1 ± 0.8	6.9 ± 0.8	7.1 ± 1.0	5.7–8.8
HGB (g/l)						
Mean ± SD	168.4 ± 16.2	170.4 ± 19.8	172.7 ± 24.8	166.4 ± 22.4	169.6 ± 23.0	129–184
HCT (l/l)						
Mean ± SD	0.494 ± 0.050	0.496 ± 0.061	0.504 ± 0.072	0.493 ± 0.069	0.498 ± 0.069	0.37–0.57
MCV (fL)						
Mean ± SD	69.6 ± 3.4	69.0 ± 2.4	70.6 ± 3.1	70.6 ± 2.7	70.3 ± 2.9	58.8–71.2
MCH (pg)						
Mean ± SD	23.6 ± 1.2	23.7 ± 0.9	24.2 ± 0.8	24.2 ± 0.7	24.1 ± 0.8	20.5–24.2
MCHC (g/l)						
Mean ± SD	341.0 ± 8.8	343.0 ± 6.2	342.8 ± 8.4	342.5 ± 7.5	342.7 ± 7.6	320–360

HCT = haematocrit; HGB = haemoglobin concentration; MCH = mean corpuscular haemoglobin; MCHC = mean corpuscular haemoglobin concentration; MCV = mean corpuscular volume; RBC = red blood cell count; REF = reference ranges (ADVIA 120; Siemens, Munich, Germany); SD = standard deviation

Table S2. White blood cell count and white blood cell differential count of brachycephalic dogs with various grades of brachycephalic obstructive airway syndrome (BOAS) and healthy non-brachycephalic dogs (control)

Parameter	Control (n = 37)	Grade 1 (n = 17)	Grade 2 (n = 42)	Grade 3 (n = 47)	All patients (n = 106)	REF
WBC ( $10^9/l$ )						
Median	9.6	9.2	10.1	10.2	10.1	5.2–13.9
IQR	8.7–11.3	8.1–11.5	8.5–12.8	8.1–13.3	8.2–12.8	
NEUT ( $10^9/l$ )						
Median	5.26	6.21	6.62	6.12	6.32	3.9–8.0
IQR	4.30–7.16	4.71–6.95	5.22–8.04	4.79–7.84	4.99–7.80	
LYMPH ( $10^9/l$ )						
Median	2.85	2.37	2.48	2.44	2.45	1.3–4.1
IQR	2.36–3.39	1.91–2.93	1.95–3.32	1.81–2.98	1.95–3.02	
MONO ( $10^9/l$ )						
Median	0.380	0.500	0.540	0.530	0.530	0.2–1.1
IQR	0.305–0.470	0.360–0.650	0.413–0.778	0.400–0.690	0.388–0.695	
EOS ( $10^9/l$ )						
Median	0.480	0.260	0.255	0.280	0.280	0.0–0.6
IQR	0.300–0.750	0.125–0.565	0.178–0.445	0.150–0.440	0.170–0.443	
BASO ( $10^9/l$ )						
Median	0.020	0.020	0.020	0.020	0.020	0.0–0.1
IQR	0.020–0.030	0.010–0.040	0.018–0.033	0.020–0.030	0.020–0.030	
LUC ( $10^9/l$ )						
Median	0.020	0.020	0.025	0.030	0.020	0.0–0.3
IQR	0.015–0.030	0.015–0.030	0.010–0.050	0.010–0.060	0.010–0.040	

BASO = basophil count; EOS = eosinophil count; LUC = large unstained cell count; LYMPH = lymphocyte count; MONO = monocyte count; NEUT = neutrophil count; REF = reference ranges (ADVIA 120; Siemens, Munich, Germany); SD = standard deviation; WBC = white blood cell count

Table S3. Biochemical parameters of brachycephalic dogs with various grades of brachycephalic obstructive airway syndrome (BOAS) and healthy non-brachycephalic dogs (control)

Number	Control (n = 14)	Grade 1 (n = 17)	Grade 2 (n = 42)	Grade 3 (n = 47)	All patients (n = 106)	REF
Glucose (mmol/l)						
Median	5.60	6.00	5.85	5.90	5.90	3.61–6.55
IQR	5.38–6.23	5.60–6.20	5.40–6.53	5.40–6.50	5.40–6.42	
Urea (mmol/l)						
Median	7.46	5.69	6.00	6.20	6.07	2.50–9.60
IQR	5.12–8.59	4.80–6.89	5.07–6.92	4.86–7.34	4.95–7.21	
Creatinine (μmol/l)						
Median	90.2	83.1	84.9	84.9	86.6	44.2–132.6
IQR	84.5–135.4	70.2–116.9	71.7–105.9	70.2–102	71.1–107.3	
ALP (μkat/l)						
Median	0.420	0.808	0.573	0.560	0.607	0.333–2.550
IQR	0.275–0.627	0.537–1.537	0.385–0.808	0.383–0.807	0.385–0.890	
ALT (μkat/l)						
Median	0.620	0.762	0.790	0.807	0.795	0.350–2.467
IQR	0.377–0.807	0.610–1.087	0.565–1.103	0.593–0.958	0.593–1.085	

ALP = alkaline phosphatase; ALT = alanine aminotransferase; IQR = interquartile range (25<sup>th</sup> to 75<sup>th</sup> percentile); REF = own reference ranges