**Supplementary Table 1. Clinical and laboratory data from 92 dogs with neuroangiostrongyliasis** **(2010-2020).**

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Case  | Age  | Breed/Gender/Signs/Imaging/Date | CSF cell count(cells/µL) | Eosinophils(%) | Serology(ELISA titre on CSF and/or serum) | PCR Result/CT value(200 µL CSF unless otherwise stated) | IDEXX Angio Detect™#\*\* |
| 1 | 12 years | Labrador RetrieverF26/1/2010 | 5,168 | 95% | 6,400 | n/a | negative |
| 2 | n/a | n/a12/12/2010 | n/a | n/a | <100 | positive31.1(< 50 µL) | n/a |
| 3 | 4 years | Kerry Blue terrierFN14/1/2011 | 14,690 | 85% | ≥12,800 | positive29.1 | negative |
| 4 | 9 months | Golden Retriever MN3/05/2011 | 19,970 | 93% | ≥12,800 | positive33.4 | n/a |
| 5 | 1 year | Staffordshire bull terrierMN13/5/2011 | 1,000 | 82% | 200 | positive29.8 | n/a |
| 6 | 1 year | Staffordshire bull terrierM3/6/2011 | 146,150 | 92% | 6,400 | positive27.0(100 µL) | n/a |
| 7 | 3 years | Golden RetrieverM30/6/2011 | 215 | 15% | 400 | negative | n/a |
| 8 | 4 months | Staffordshire bull terrier cross M28/03/12 | 3,630 | 64% | 100 or 200 | positive23.4 | n/a |
| 9 | 2 years | Labrador retrieverMN2/4/12 | 6,570 | 90% | 6,400 | positive37.6 | n/a |
| 10 | 2 months | Bull terrierM30/4/2012 | 1,553(cisternal)8,340(lumbar) | 80%94% | 400 | positive31.6 | n/a |
| 11 | 5 months | PoodleMN9/5/2012 | 3,140 (cisternal)63,180 (lumbar) | 83%83% | 200 (cisternal)1,600(lumbar) | positive29.9 | n/a |
| 12 | 12 months | Poodle Cross MN 22/06/12 | 16,530 | 95% | 1,600 | positive25.8 | n/a |
| 13 | 11 months | Staffordshire bull terrier cross M5/7/2012 | 3,340 | 95% | 3,200 | negative | n/a |
| 14 | 4 months | Portuguese Water dogFN10/9/2012 | 4,470 | 86% | 400 | positive35.5 | n/a |
| 15 | 1 year | Pomeranian crossM20/3/2013 | 10,080 | 88% | 800 | positive35.1 | n/a |
| 16 | 4 months | Staffordshire bull terrierM18/6/2013 | 4,020 | 83% | ≥12,800 | positive27.3 | n/a |
| 17 | 6 months | Labrador retrieverMN30/7/2013 | 2,559 | 75% | 6,400 | positive34.4 | n/a |
| 18 | 10 weeks | Airedale TerrierM24hr history of acute onset lethargy, shuffling gait and painful when touched. Mild pyrexia (39.3) and multiple joint/spinal pain on exam. Peripheral eosinophilia.6/3/2014 | 2,550 | dominated by eosinophils | <100 | positive26.0 | n/a |
| 19 | 6 years | Jack Russel terrierFN14/4/2014 | 5,550 | 90% | 3,200 | positive31.7 | n/a |
| 20 | 5 months | Rottweiler F 23/4/2014 | 4,130-12,195 | 70-78% | ≥12,800 | positive38.1 | n/a |
| 21 | 7 months | German Shepherd MN30/4/2014 | 9,050 | 90% | ≥12,800 | positive34.0(100 µL) | n/a |
| 22 | 4 months | Cocker Spaniel M16/5/2014 | 2,600 | 82% | 100 or 200 | positive33.1 | n/a |
| 23 | 8 months | Labrador retrieverF22/4/2015 | 9,340 | 86% | 100 | positive26.7 | n/a |
| 24 | 5 years | Tibetan Spaniel FN5/1/2015 | 1,143 | Low numbers of eosinophils | 3,200 | n/a | negative |
| 25 | 2 months | Golden Retriever FN 15/05/2015 | 45 | 33% | <100 | positive27.7 | n/a |
| 26 | 14 years | Poodle cross MN 22/05/2015 | 573 | 84% | n/a | n/a | n/a |
| 27 | 2 months | German Shepherd M25/05/2015 | 8,490 | 90% | ≥12,800 | positive33.8 | n/a |
| 28 | 3 months | Staffordshire bull terrierM9/7/2015 | 3,860(cisternal)11,430 (lumbar) | 70%80% | 400 | positive29.4 | n/a |
| 29 | 10 years | ‘Bull Arab’ MRI showed intramedullary changes T10-T13 with streaky contrast enhancement post-gadoliniumFN9/9/2015 | n/a | 44% | n/a | n/a | n/a |
| 30 | 3 months | Miniature Schnauzer M16/09/2015 | 5,960-5,040 | 67-84% | 100 or 200 | positive30.2 | n/a |
| 31 | 3 months | Miniature SchnauzerM13/2/2016 | 5,940 | 80% | 100 | positive25.7 | n/a |
| 32 | 4 months | Miniature Schnauzer Presented with marked cervical pain and some back pain. MRI showed myelitis and meningitis.M19/02/16 | 8,280 | 83% | <100 | positive31.1 | n/a |
| 33 | 4 months | Labrador retrieverM24/03/2016 | 640 | 83% | ≥12,800 | positive33.9 | n/a |
| 34 | 4 years | Maltese FN 22/04/16 | 7,020 | 93% | ≥12,800 | positive28.3 | n/a |
| 35 | 2 months | Labrador retrieverM29/4/2016 | 33,850 | 88% | 100 | positive30.9 | n/a |
| 36 | 3 months | Labrador retriever F9/5/2016 | 5,280 | 89% | <100 | positive30.8 | n/a |
| 37 | 11 years | Border Terrier Presented with urinary incontinence and hindlimb long tract signs; MRI showed swelling of the lumbar cord with no changes in the brain.MN12/5/2016 | 394 | 94% | ≥12,800 (CSF)400 (serum) | n/a | negative |
| 38 | 8 months | Jack Russel terrier FN17/5/2016 | 2,160 | 93% | ≥12,800 | positive27.5(50 µL) | n/a |
| 39 | 4 months | Golden retriever Poodle cross (Groodle)F23/6/2016 | 5,130 | 92% | 100 | positive31.1 | n/a |
| 40 | 5 months | French bulldogM26/7/2016 | 464 | 90% | <100 | negative(20 µL) | n/a |
| 41 | 5 months | Spaniel Poodle cross (Spoodle)F16/3/2017 | 3,110 | 80% | ≥12,800 | negative | n/a |
| 42 | 3 years | Labrador RetrieverMN24/3/2017 | 2,700 | 81% | n/a | n/apositivewith Vetnostics PCR | n/a |
| 43 | 5 months | Boston terrier Presented with posterior ataxia & weakness neck pain and strabismus. MRI identified multifocal lesions of the brain and left cervical region.MN5/4/2017 | 196 | Dominated by eosinophils | Positive (actual result n/a) | n/a | n/a |
| 44 | 15 months | Boston terrier MN10/4/2017 | 5,220 | 87% | n/a | n/a | n/a |
| 45 | 9 years | Kelpie Presented with non-specific pain - query spinal pain.FN20/4/2017 | 1,919 | 84% | n/a | n/a | n/a |
| 46 | 11 weeks | Rottweiler MN23/5/2017 | 311 | Dominated by eosinophils | n/a | n/apositive\*with Vetnostics PCR | n/a |
| 47 | 7 weeks | Australian Bulldog Presented with neck and lumbosacral pain. M31/5/2017 | 10,935 | Dominated by eosinophils | n/a | n/apositive  29.6with Vetnostics PCR | n/a |
| 48 | 5 years | French BulldogFNPresented for head tremors (included in error).MRI unremarkable20/6/2017 | 2.2(cisternal) | 0% | <100 | positive 23.8 | n/a |
| 49 | 3 months | Cavalier King Charles spaniel poodle cross (Cavoodle)M27/7/2017 | 12,970 | 63% | <100 | positive27.7 | n/a |
| 50 | 10 months | Great DaneFN1/8/2017 | 197 | 90% | ≥12,800 | negative | n/a |
| 51 | 14 months | French Bulldog Presented with lethargy and poor appetite. Meningo-encephalitis on MRI.M24/4/2018 | 2,943 | 80% | 3,200 (CSF)800 (serum) | n/anegative with Vetnostics PCR | n/a |
| 52 | 4 months | Australian Bulldog M26/4/2018 | 1,026(lumbar) | 83% | ≥12,800 | n/apositive31.1with Vetnostics PCR | n/a |
| 53 | 2 months | St. GroodlePresented with soft signs for ~ 1-2 days then acute severe hind limb paresis. F5/5/2018 | 5,265 | 73% | n/a | n/anegative with Vetnostics PCR | n/a |
| 54 | 5 months | Labrador retrieverPresented with hind limb weakness, fever, flaccid tail and peripheral eosinophilia.F15/5/2018 | 4,120 | 77% | 400 (CSF)400 (serum) | n/anegativewith Vetnostics PCR | n/a |
| 55 | 17 months | Boston terrier Presented with acute non-ambulatory tetraparesis over 24 hours.MN15/5/2018 | 41,000 | 65% | 3,200 (CSF)800 (serum) | n/anegativewith Vetnostics PCR | n/a |
| 56 | 4 months | Kelpie crossPresented with thoracolumbar and neck pain, hindleg paresis and conscious proprioceptive deficits.M14/6/2018  | 6,480 | 79% | ≥12,800 (CSF)≥12,800 (serum) | n/apositive35.2with Vetnostics PCR | n/a |
| 57 | 4 months | Labrador retrieverF17/7/2018 | 1,000 | 89% | ≥12,800 | positive30.1 | n/a |
| 58 | 1 year | Jack Russel Terrier cross Presented with a swollen eye, neck pain, peripheral eosinophilia, then 4 weeks later cortical blindness, tetraparesis and ataxia and eventually seen at SUVTH where MRI showed extensive cortical changes.MN28/3/2019 | 193 | 89% | 800 | n/a | n/a |
| 59 | 1 year  | Labrador retrieverPresented with acute onset neck pain; good response to dexamethasone given 1 week ago, then recurred.FN1/4/2019 | 3,420 | 81% | ≥12,800 | negative | n/a |
| 60 | 5 months | LogottoM2/4/2019 | 14,400 | 89% | ≥12,800 | positive32.1negative with Vetnostics PCR | n/a |
| 61 | 4 months | American Staffordshire Bull terrier Presented with neck pain, inappetence, fever.F8/4/2019 | 2,900 | 85% | 400 | positive28.3positive34.2 with Vetnostics PCR | n/a |
| 62 | 6 months | French bulldogPresented with lethargy, dullness, uncomfortable.FN15/4/2019 | 69 | 39% | <100 | negativenegative with Vetnostics PCR | n/a |
| 63 | 4 years | Maltese crossMN24/4/2019 | 1 | 1% | <100 | positive27.7 negative with Vetnostics PCR |  |
| 64 | 3 months | Border Collie Presented with acute hindlimb ataxia, thoracolumbar pain, eosinophilia.M17/4/2019 | 4,320(lumbar) | 82% | 200 | positive34.0negative with Vetnostics PCR | n/a |
| 65 | 4 months | Border Collie Presented with neck pain and lethargy.M20/4/2019 | 1,800(lumbar) | 83% | 1,600 | positive37.7negative with Vetnostics PCR | n/a |
| 66 | Various ages;2 months | Multiple Labrador retriever pups Presented with spinal pain, fever, hindlimb paraparesis and ataxia, lethargy.24/4/2019 | 3,780 | 89% | 100 | positive27.3negative with Vetnostics PCR | n/a |
| 67 | 3 months | Golden Retriever Presented with hindlimb weakness over 3 days.M26/4/2019 | 5,040 | 78% | 200 | positive30.0negative with Vetnostics PCR | n/a |
| 68 | 3 months | Staffordshire Bull terrier Presented with 10-day history of pain when picked up, paraparesis and ataxia.M29/4/2019 | 3,200 | 98% | <100 | negative | n/a |
| 69 | 4 months | French bulldog Presented with quadriparesis, hindlimb proprioceptive ataxia, no spinal pain, increased myotatic reflexes in hindlimbs.M3/5/2019 | 15,705 | 90% | ≥12,800 | positive31.6negative with Vetnostics PCR | n/a |
| 70 | 4 months | Groodle Presented with ataxia and back pain.M17/5/2019 | 38,200 | 82% | 3,200 | positive31.5negative with Vetnostics PCR | n/a |
| 71 | 5 months | Miniature SchnauzerFNeck pain and lethargy.12/6/2019 | 4,600 | 80% | <100 | positive36negative with Vetnostics PCR |  |
| 72 | 4 months | Labrador RetrieverFever, thoracolumbar back pain, pelvic limb paresis and conscious proprioceptive deficits.F25/6/19 | 2,790 | 75% | 400 | positive31.0negative with Vetnostics PCR | n/a |
| 73 | 9 weeks | Labrador retrieverPresented with hindlimb paresis and ataxia, non-ambulatory, diffuse spinal hyperaesthesia, urinary incontinence (LMN in type), MRI normal.M17/5/2019 | 2,420 | >35%(some cells condensed) | <100 (CSF)200 (serum) | n/a | n/a |
| 74 | 4 months | Golden cross Labrador retrieverAte a slug on 22nd or 23rd June and developed signs on 1st July consisting of spinal hyperesthesia, paresis (non-ambulatory), urinary incontinence, loss of tail tone; mild peripheral eosinophilia.F1/7/2019 | 24,840 | 86% | 1,600 (CSF)400 (serum) | positive26.3positive32.4using Vetnostics PCR | n/a |
| 75 | 11 weeks | RidgebackM3/7/2019 | 7,920 | 90% | 200 | positive24.0positive30.9using Vetnostics PCR | n/a |
| 76 | 3 months | Jack Russel terrier cross Presented with clinical signs consisting of spinal hyperesthesia, paresis (ambulatory), ataxia, urinary incontinence.F3/7/2019 | 1,238 | 79% | n/a | n/a | n/a |
| 77 | 3 months | American Staffordshire Bull terrierF17/7/2019 | 8,640 | 69% | n/a | n/a | n/a |
| 78 | 11 months | Labrador RetrieverMNAcute onset neck pain.12/8/2019 | 8,460 | 80% | 200 | positive36.0 | n/a |
| 79 | 9 months | MastiffFNUncomfortable, painful at multiple sites along the back, proprioceptive deficits left hind leg, generally hyperaesthetic.CT largely unremarkable.26/2/2020 | 1,680(lumbar) | 90% | n/a | positive39.5 (CSF)Negative for blood and urineVetnostics PCR negative | n/a |
| 80 | 5 months | Border CollieM4/03/2020 | 3,940 | 86% | n/a | positive 36.8Vetnostics PCR negative | n/a |
| 81 | 7 months | DalmatianHind limb incoordination worse on the right, lumbosacral and tail painCT normal; MRI showed focal ill-defined L2- 3 T2 hyperintensity, no compressive lesionsM3/3/2020 | 14,411 | 92% | n/a | positive32.2 (CSF)Negative for blood and urine | n/a |
| 82 | 9 weeks | Labrador RetrieverF4/3/2020 | 11,580(lumbar) | 84% | n/a | positive 28.4 | n/a |
| 83 | 3 months | Poodle CrossMNBack pain, pyrexia, possibly snail ingestion.16/3/2020 | 14,130 | 86% | n/a | n/a | n/a |
| 84 | 3 months | American BulldogFAcute onset of pelvic limb weakness.19/3/2020 | 13,365 | 84% | n/a | n/a | n/a |
| 85 | 6 months | English Bull terrierMBack pain not responsive to codeine, then thoracolumbar pain and hind limb ataxia with conscious proprioceptive deficits in the hind limbs.31/3/2020 | 1,320 | 91% | n/a | n/a | n/a |
| 86 | 3 months | German Shorthaired pointerF4/4/2020 | 4,530 | 82% | n/a | n/a | n/a |
| 87 | 9 years | Staffordshire bull terrier MN | n/a | n/a | 6,400 | n/a | n/a |
| 88 | 8 years | Cross-bredFN | n/a | n/a | 3,200 | n/a | n/a |
| 89 | 7 years | Staffordshire bull terrierMN  | n/a | n/a | 3,200 | n/a | n/a |
| 90 | 9 years | Staffordshire bull terrierMN | n/a | n/a | 3,200 | n/a | n/a |
| 91 | 8 years | PugM | n/a | n/a | 6,400 | n/a | negative |
| 92 | ? | Rottweiler ?? | n/a | n/a | 3,200 | n/a | negative |

\*Negative PCR on blood 10 days later

# Antigen testing using the IDEXX point-of-care immunochromatography test designed for *A vasorum* (Angio Detect™)

MN Male neutered; FN Female neutered; M entire male; F entire female