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Response to: Was the "alternating head tilt" "positioning head tilt"?

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We would like to thank Dr Tamura for his interest in our article describing MRI findings in a young dog with gliomatosis cerebri (Liatis et al. 2021). Dr Tamura raises a very interesting point regarding the semiology of the dog of our report, wondering whether the "alternating" was a positioning head tilt.

In human literature, the terms positional and positioning have been applied to nystagmus: (1) positional – occurs and persists while maintaining a new static head position, whilst (2) positioning – the nystagmus is provoked by the act of moving the head from one position to the next and eventually decays away if the new position is maintained (Yagi & Eggers 2010). Positional signs (i.e. nystagmus, strabismus) are well described in veterinary neurology (De Lahunta et al. 2021), whilst positioning head tilt has been recently described in dogs with cerebellar hypoplasia affecting the cerebellar nodulus and uvula (CNU) (Tamura et al. 2016, Prikryl et al. 2020, Tamura 2021).

After reviewing videos of our case (Liatis et al. 2021), we agree with Dr Tamura that our dog manifested a positioning head tilt, which developed each time head was changing position and was absent when the head was static or when walking on a straight line (Video S1). Additionally, after dorsal extension of the head, exacerbation of signs was occurring [induction of left head tilt, vertical (downbeat) nystagmus, skew deviation (vertical misalignment of the eyes)], which were abating with time (Video S1). Similar semiology has been reported in dogs (Prikryl et al. 2020) and humans with CNU pathology (Sander et al. 2006). Whether this downbeat nystagmus is a result of vestibulo-ocular reflex deficit or smooth pursuit imbalance is unknown (Tilikete & Pelisson 2008).

Therefore, we consider that our dog manifested positioning head tilt, positioning vertical (downbeat) nystagmus and skew deviation associated with CNU neoplastic lesion.

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