

# Letter regarding “Aortopulmonary fistula in a Warmblood mare associated with an aortic aneurysm and supravalvular aortic stenosis”

Dear Editor,

We read with interest the case report “Aortopulmonary fistula in a Warmblood mare associated with an aortic aneurysm and supravalvular aortic stenosis”.<sup>1</sup> The authors describe a unique case of a congenital cardiovascular disease (ie, supravalvular aortic stenosis) associated with rare acquired cardiovascular disorders in non-Friesian horses (ie, aortic aneurysm and aortopulmonary fistula). The authors also reported a detailed description of the gross pathology and histopathologic features of the aortic lesions, suggesting a final diagnosis of cystic medial degeneration (CMD). The histomorphologic characterization of aortic diseases, with or without aortopulmonary or aortocardiac fistulation, is uncommonly reported in the equine literature.<sup>1-7</sup> Furthermore, to the author's knowledge, no specific definition and grading of noninflammatory degenerative diseases of the aorta can be found in the veterinary literature. The histopathologic findings described by Saey et al<sup>1</sup> share some similarities with those we observed in the aorta of a Paint mare with ruptured aneurysm of the right sinus of Valsalva associated with aortocardiac fistula.<sup>7</sup> In our report, we used the diagnosis of aortic medial degeneration with mucoid extracellular matrix accumulation instead of the more generic definition of CMD.

We would like to bring to the attention of the readers of JVIM that new consensus terms have been developed for the condition formerly known with the common term of CMD or cystic medial necrosis in the medical literature. In particular, the Society of Cardiovascular Pathology and the Association for European Cardiovascular Pathology published in 2016 a consensus statement on noninflammatory degenerative diseases of the aorta.<sup>8</sup> These international guidelines introduced an unified and stable nomenclature, specifically defined each microscopic alterations, and implemented a 3-stage grading system for all aortic lesions previously described under the common microscopic denominator of medial degeneration of variable degree. Indeed, the terminology previously employed to describe microscopic structural alterations of the aorta of human patients had been subjective and inconsistent for many years.<sup>8</sup> We think that these guidelines may also be useful for both veterinary pathologists and clinicians and

should be used in the precise characterization and grading of aortic noninflammatory diseases in animals. This suggestion does not detract from the originality of the well documented case described by Saey et al<sup>1</sup>

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