Compared anatomy of the locomotor system: a website

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Introduction: This website is a multi-dimensional approach of the locomotor system in domestic animals. The first objective of this anatomical presentation is to establish relation between systemic anatomy and topographic anatomy. The second objective is to teach a practical anatomy that must be adapted to the clinician work.

Methods: From the dissection of equine, bovine and canine specimens, osteology, arthrology and myology (OAM) were photographed and filmed. All photos and movies were captioned and designed using Fireworks (Adobe CS4, USA), AVS video converter 6 (MediaTechnologies Ltd, UK) and Divx Author (Divx Inc, USA). The website was designed using Dreamweaver (Adobe CS4, USA).

Results: Compared anatomy site consists on dichotomously organised web pages. Each page is transversally and vertically connected with others, and always surmounted by a navigation barr. From the navigation barr we can travel through different drop-down menus (DDM). The first DDM corresponds to the lesson menu (it sends to general OAM); the second and third DDMs correspond to the equine picture menu and the bovine/canine picture menu (from them we can navigate in OAM per species and per system using clickable captioned photos and movies, the functional aspects being explained). For practical reasons, equine species is used as animal reference. Indeed only anatomical differences of the other species are detailed and compared. Finally the button Index corresponds to the surgeon view (all of the body is transversally cut, the clickable anatomical structures are sent back to their specific topic web page).

Conclusions: Because of the numerous photos and movies, the three-dimensional view is better understood. Because of the transversal and vertical links, the navigation, in whatever level per species or per system or per anatomical cut, strengthens the cognitive process. This website is a fabulous multi-scale tool to teach and to learn the veterinary anatomy.