Equine dissection study investigating the underlying anatomy of acupuncture points and meridians from a fascia perspective.

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Introduction

Considerable effort has been made to find an anatomical foundation for acupuncture points, albeit without clear and coherent results. When studying the myofascial kinetic lines [1] it becomes obvious how some of them follow the acupuncture channels. Langevin (2011) [2] showed how acupuncture points overlie intermuscular fascia structures in the human arm. Indeed, her results suggest that part of the mechanism behind acupuncture occurs through the three-dimensional web of connective tissue and fascia. To this end a dissection study was undertaken to investigate, if similar connections between acupuncture points and fascia were present in the equine.

Method

The backs of seven horses, euthanized due to reasons other than this study, were dissected or cut in transverse sections to look for acupuncture points on mainly the Bladder (BL) and Governing Vessel (GV) meridians. The intermuscular fascia underlying the two branches of the BL meridian and the GV meridian were studied, including considerations about the angulation of the acupuncture needle when inserting into bladder points. Comparisons with the anatomical descriptions of the BL meridian cited in the literature were likewise also made. Furthermore, additional points on other meridians were dissected.

Results

This study has revealed how clearly and precisely the investigated acupuncture points overlie the intermuscular fascia septae. It has also revealed that the inner branch of the BL meridian runs in an intramuscular septum of m.longissimus dorsi and not between the latter and m.iliocostalis as described in the literature. Moreover, it has shown how three acupuncture points (Kidney 10, BL39 and BL40) of the hind limb, working via the fascia planes, converge on the same important deep structures (stifle joint, lymph node and tibialis nerve), which goes a long way to explaining the ancient Chinese use of the points.

Conclusion

The three-dimensional fascia web may well be the anatomical foundation for acupuncture meridians and points. The findings of this study support the ancient knowledge of how a needle inserted at one point can have effects on distant areas. Existing veterinary descriptions of the equine BL meridian need to be revised in order to be anatomically correct with regard to their position in the backmuscles.

References


Text for picture

A cross section at the level of L6-S of the equine spine. It shows how the point Bai Hui through the connective tissue can affect the supraspinal ligament, the multifidi muscles, the sacro-iliac joints and the L6-S facet joints.