

Developing an Open Source Clinical Reference Tool for the Nerve-Fascia Interface

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BACKGROUND: Numerous lines of investigation [1,2,3] have indicated that the specific anatomical relationships between nerves and associated fasciae have a high clinical relevance. However, instances of nerve-fascia interface are disparately reported in the literature, and no easily accessible reference tool exists for the use of clinicians in practice.

METHODS: Four clinician-researchers with a manual therapy background collaborated via shared Google docs, Mendeley library, and a weekly video conference. Excerpts were gathered from peer-reviewed sources describing specific nerve-fascia interfaces, and these were organized in a segmental chart with visual references from the Visible Human Project. Software developers were consulted to explore options for a peer-editable web app and the capability of gathering new case data.

RESULTS: We reviewed 121 papers from the anatomical literature in a 3-month period, in conjunction with conventional anatomical atlases. We found it necessary to include some fibrous tissues not in the domain of 'proper' fascia, and to note whether the excerpts asserted a physiologic relationship or just an anatomical proximity. A majority of excerpts, while clinically relevant, mentioned no specific fascial structure but instead concerned systemic or micro-scale relationships. Recognizing that a complete literature review would require more resources, we prioritized the use of methods that were replicable, scalable, and minimal in cost.

CONCLUSIONS: Next steps include creating an App design proposal with the help of software developers, and widening our pool of literature reviewers. The proliferation of research into fascial interfaces has created the welcome problem of meaningful translation into clinical practice. Likewise, clinicians need more efficient ways of feeding their daily experience back into the fascia literature. An open access reference tool that connects literature excerpts with visual reference, and allows for peer contribution may be a useful resource for clinicians working with the nerve-fascia interface [4].

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