



Can ultrasound scans improve osteopaths' palpation skills?

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**TEACHING
CLINICAL COMPETENCIES**

Antwerp, Belgium



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Forewords

Conflict of interest

US required understanding

US required understanding



Can ultrasound scans improve osteopathic palpation skill?

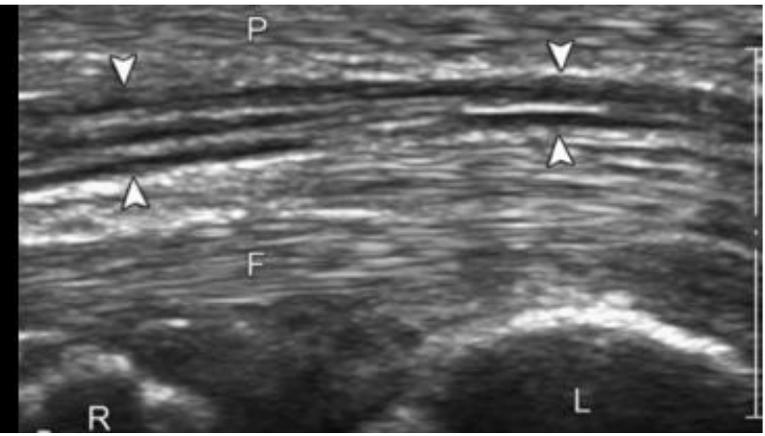
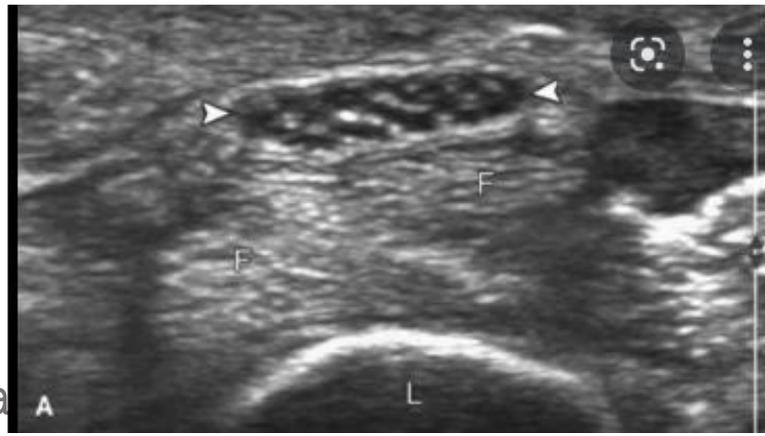
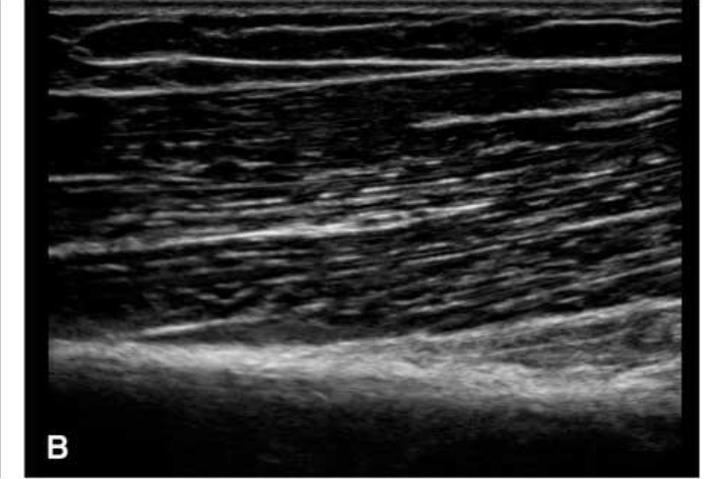
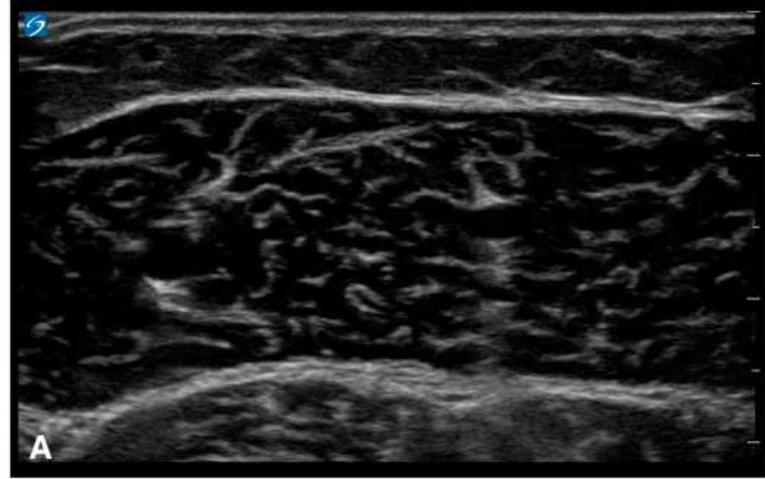
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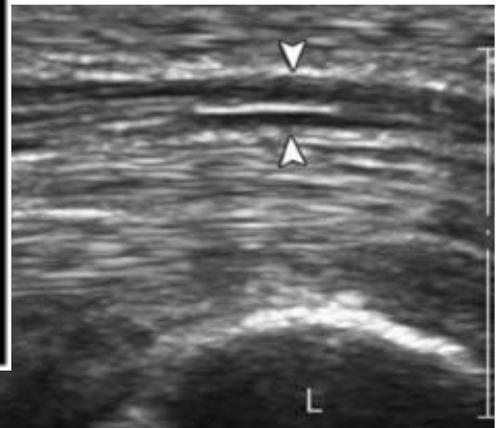
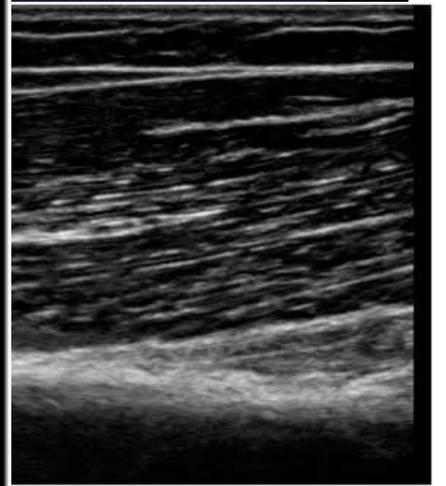
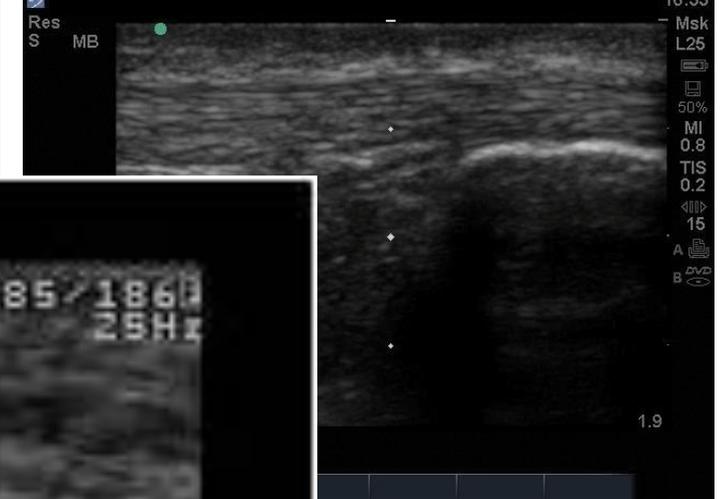
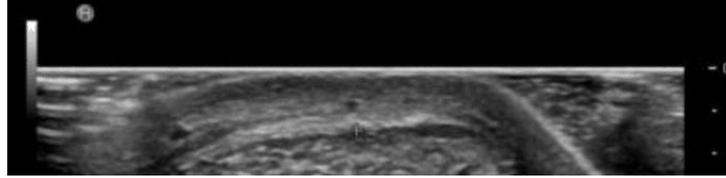


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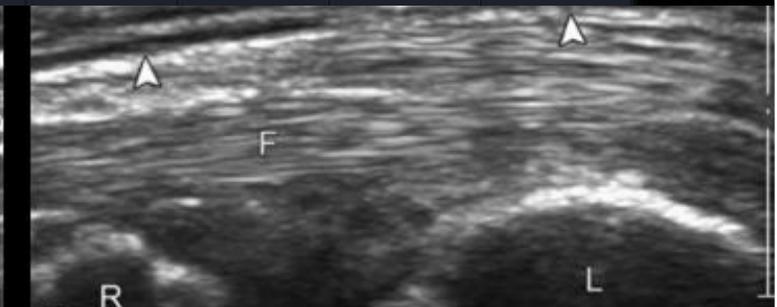
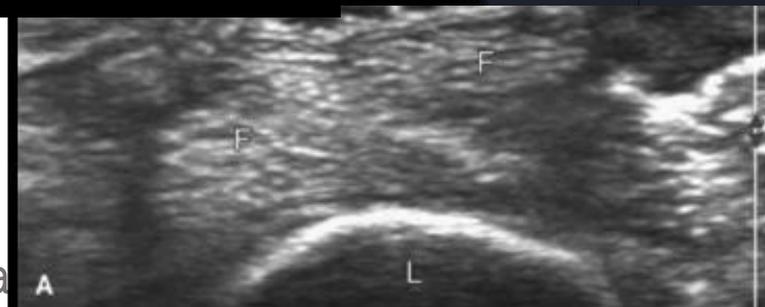
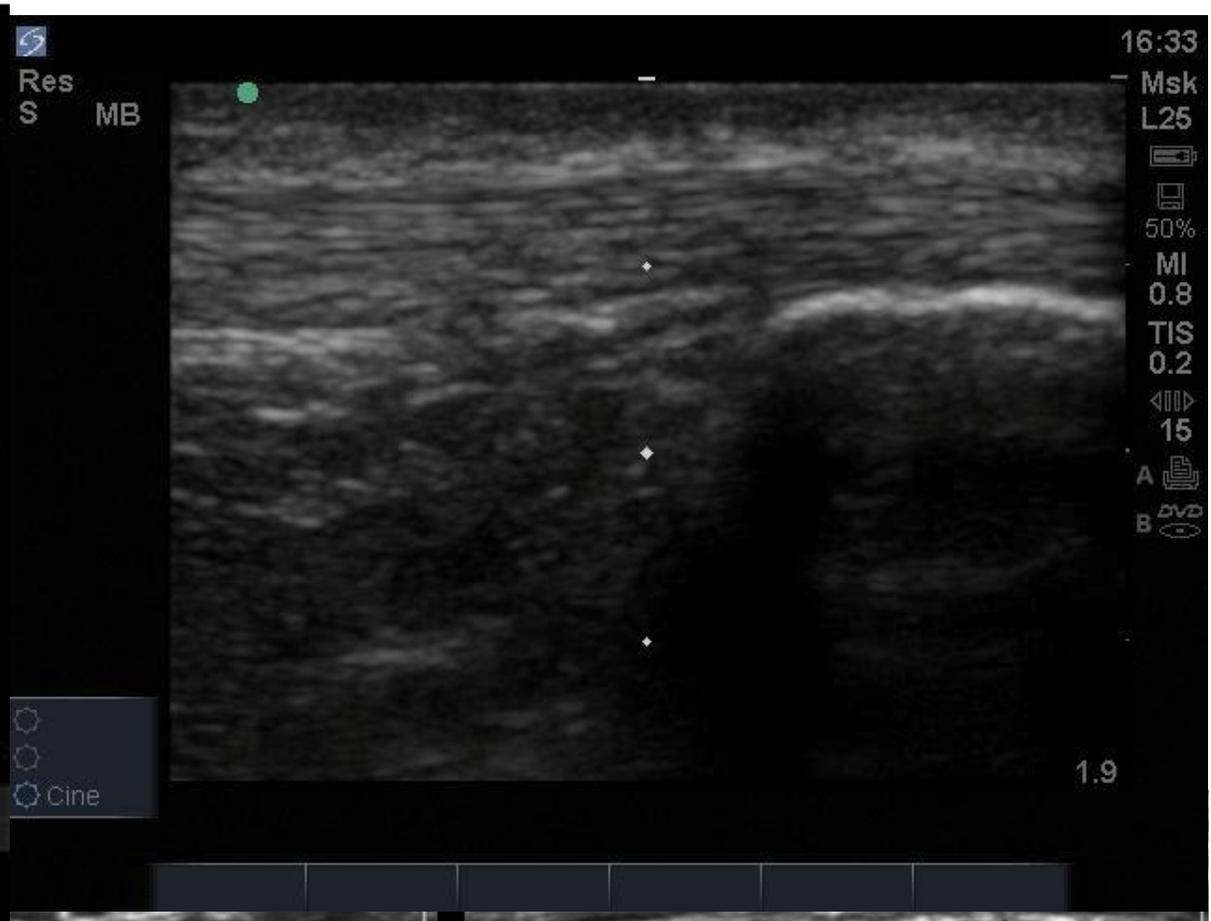
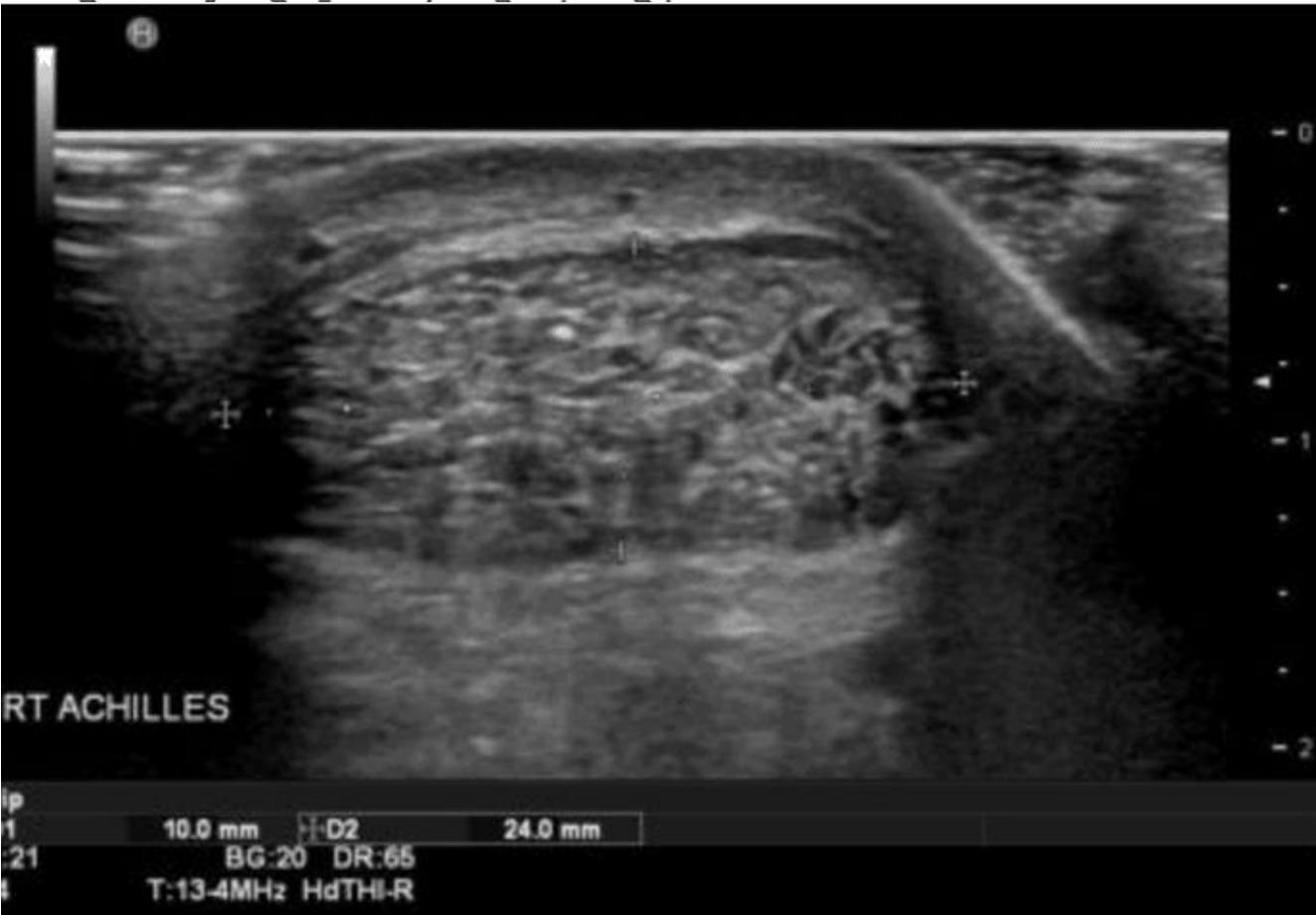


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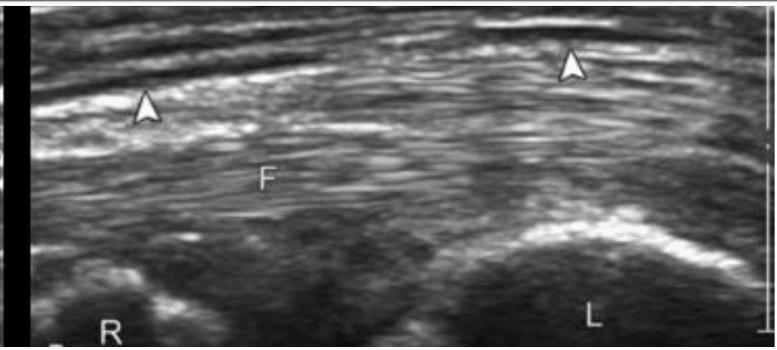
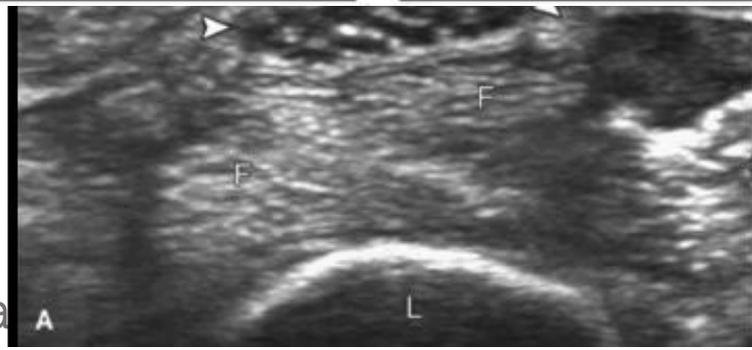
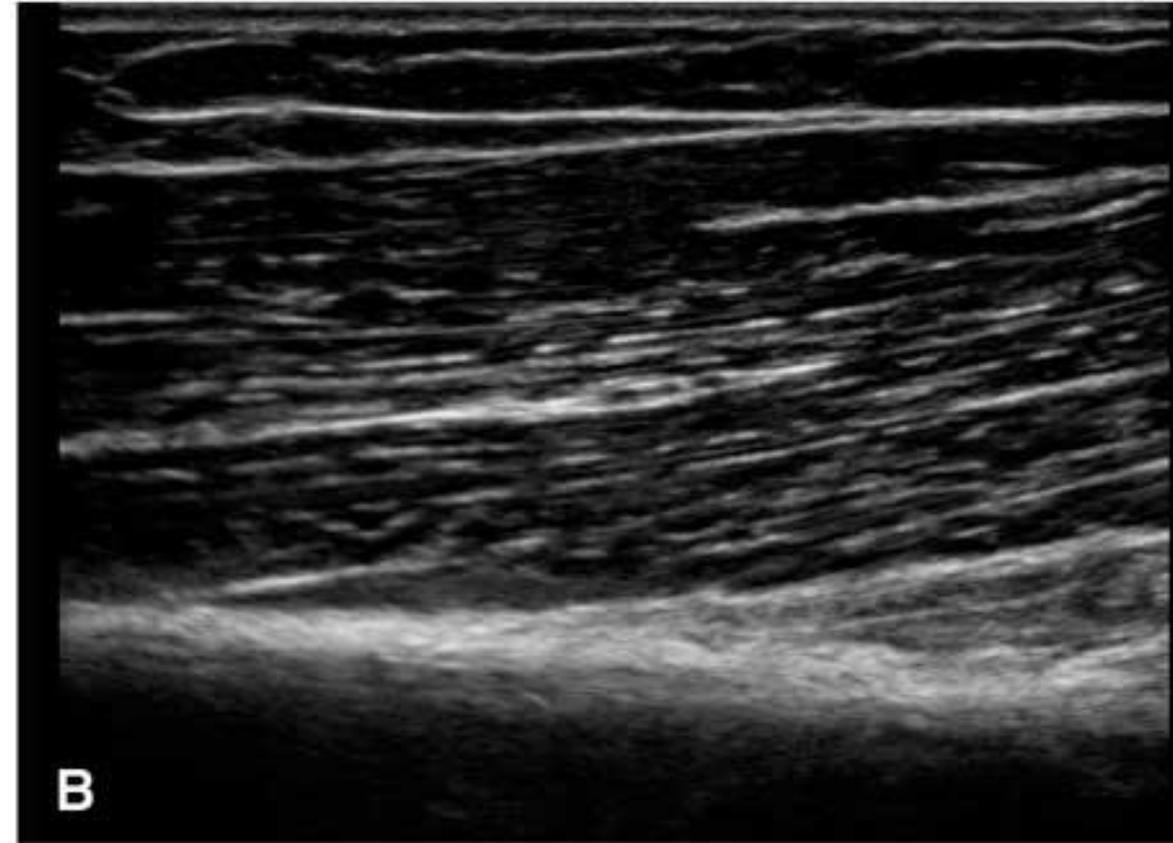
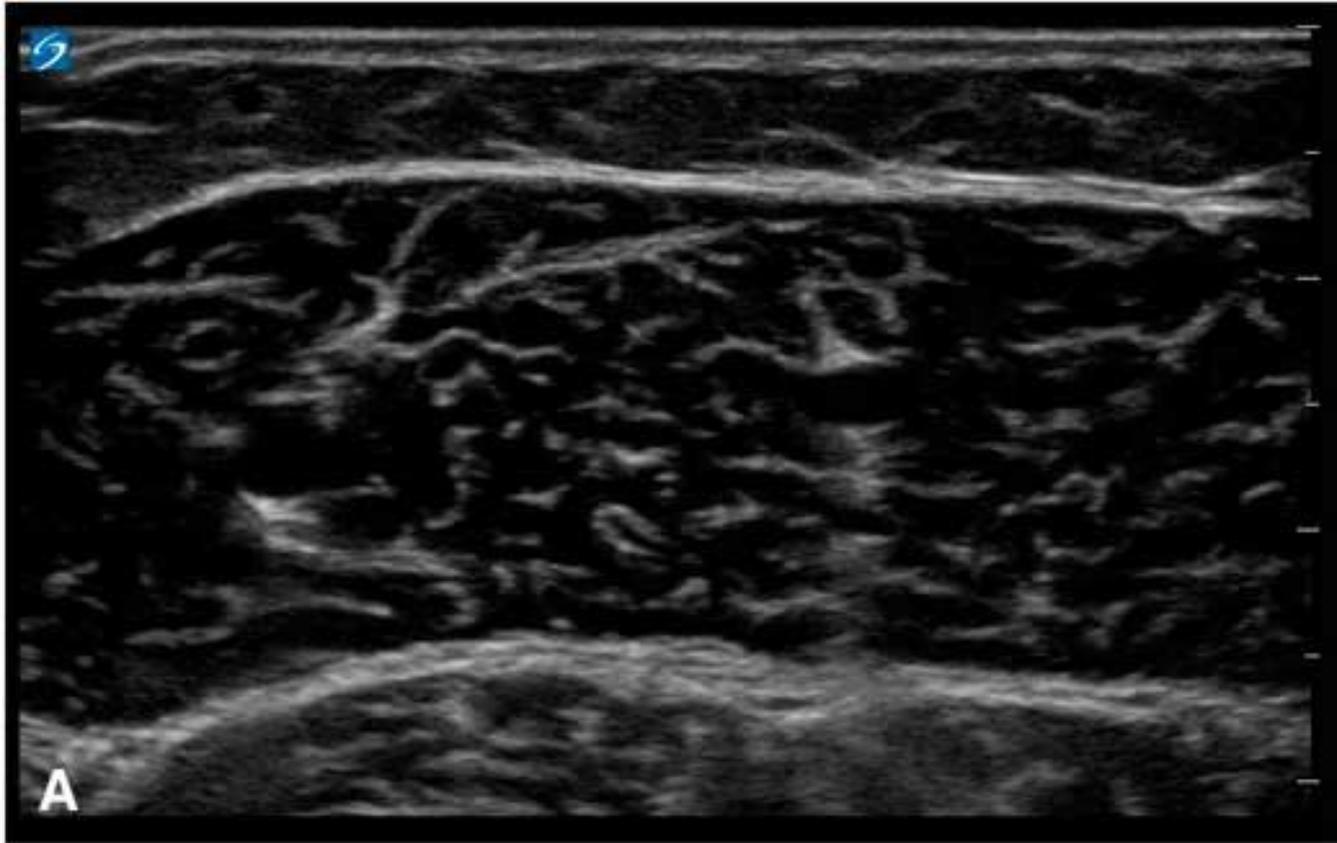
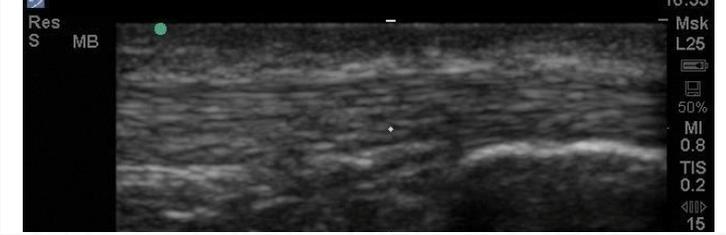
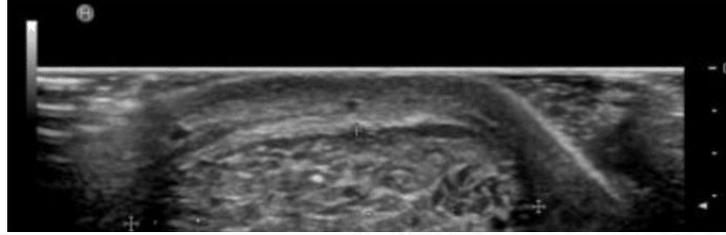


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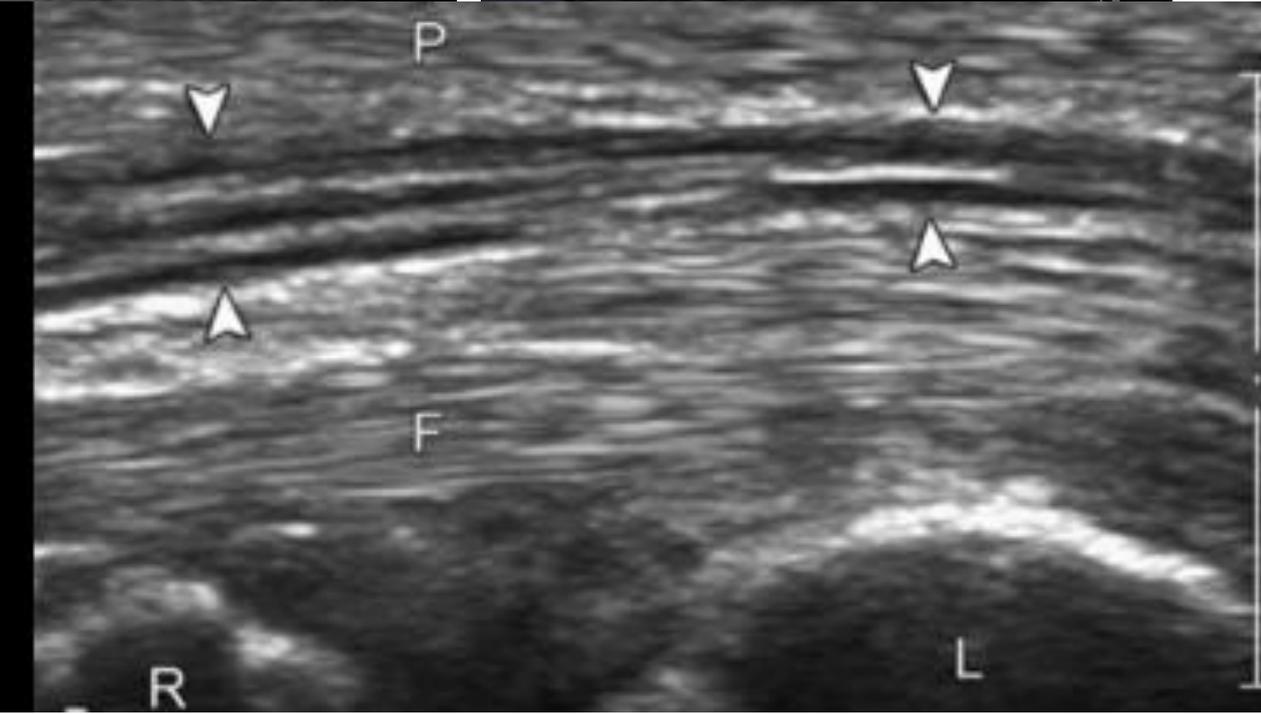
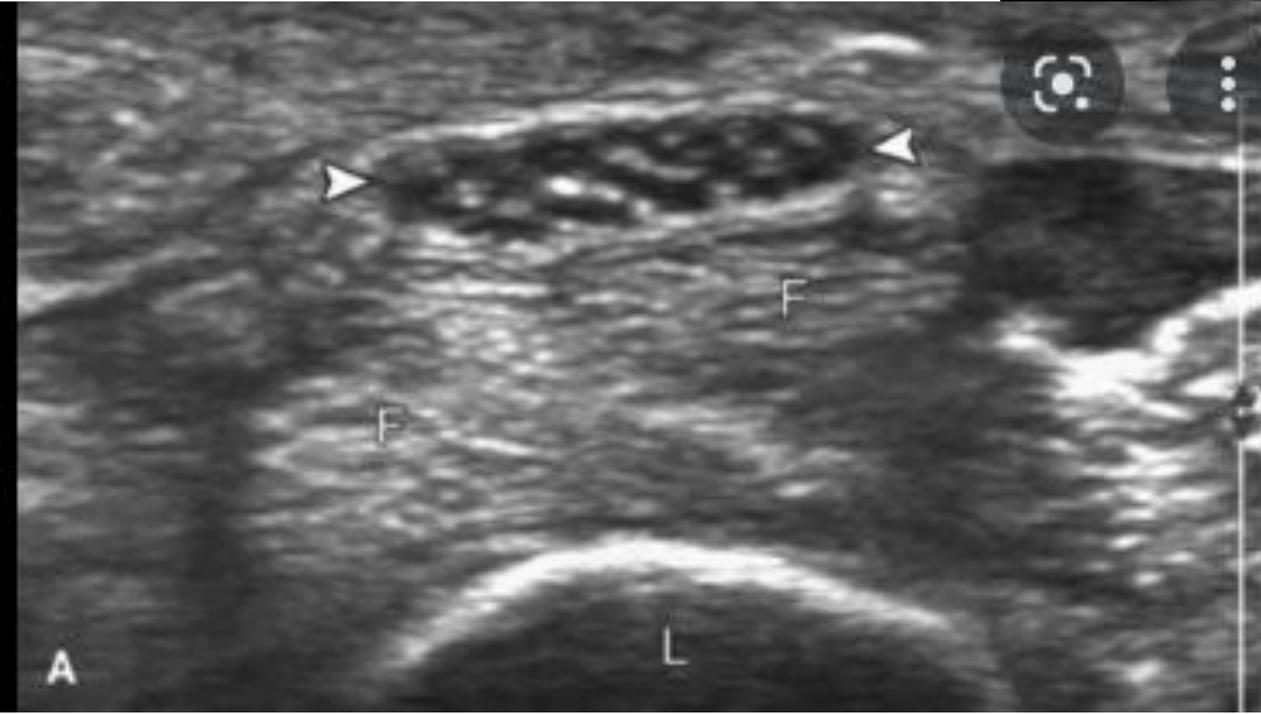
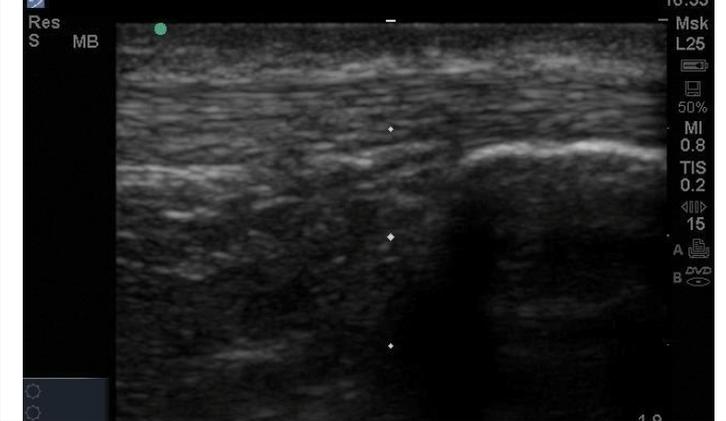
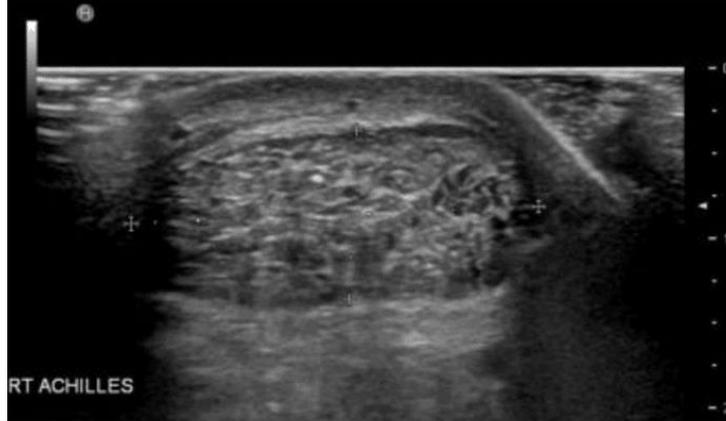


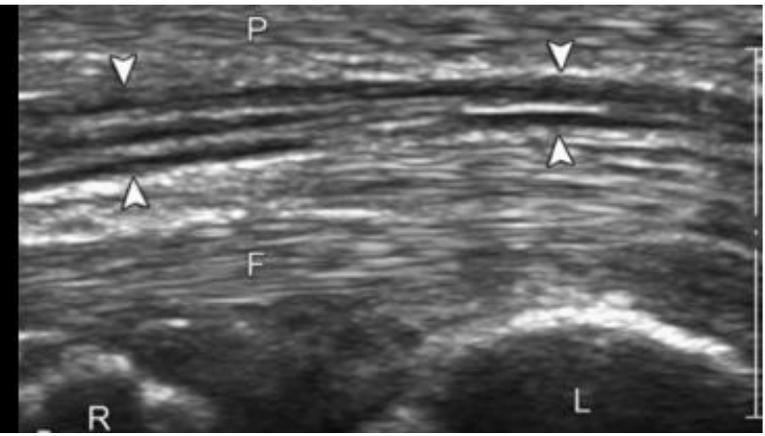
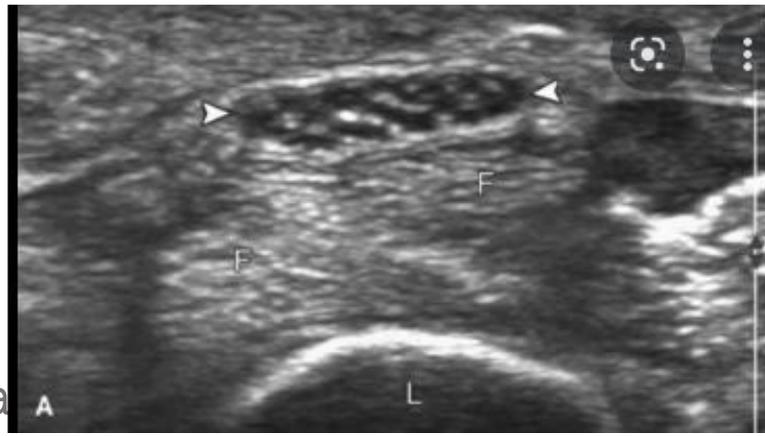
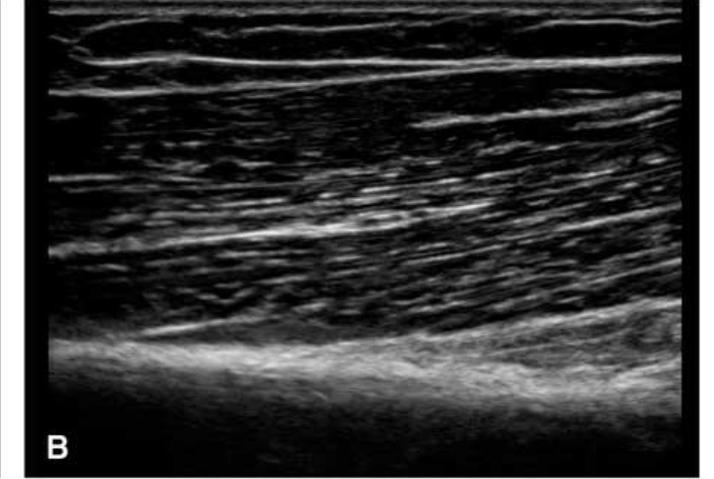
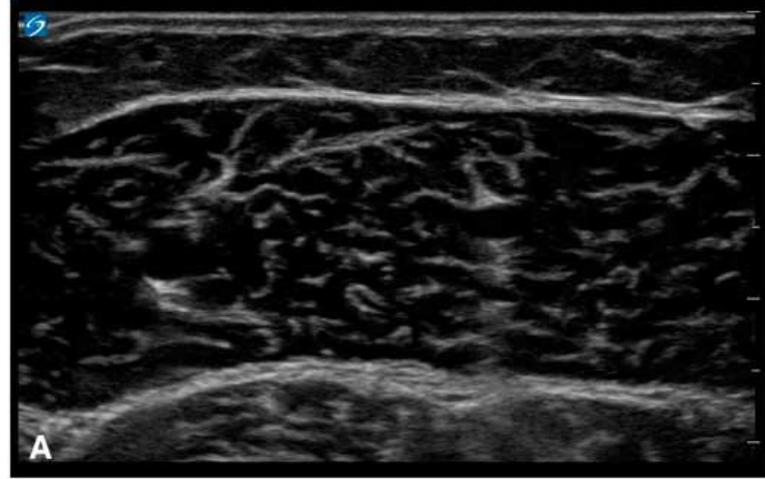


Can ultrasound scans improve osteopathic palpa



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What can US scan bring to osteopathic teaching ?

Your opinion ?

[Word Association Warm-Up - Mentimeter](#)

What can US scan bring to osteopathic teaching ?



95 % of positiv opinion

n= 36 (4th year) + 47 (3rd year) students / 32 teachers

What can US scan bring to osteopathic teaching ?

Improve US reading
(45% n=37)



Improve anatomical
knowledge
(45% n=37)



What can US scan bring to osteopathic teaching ?

Improve US reading
(31% n=10)



Improve anatomical
knowledge
(28% n=9)

See the effect of manual
technics
(26% n=8)

What can US scan bring to osteopathic teaching ?

Anatomy

Palpation

Research

US understanding

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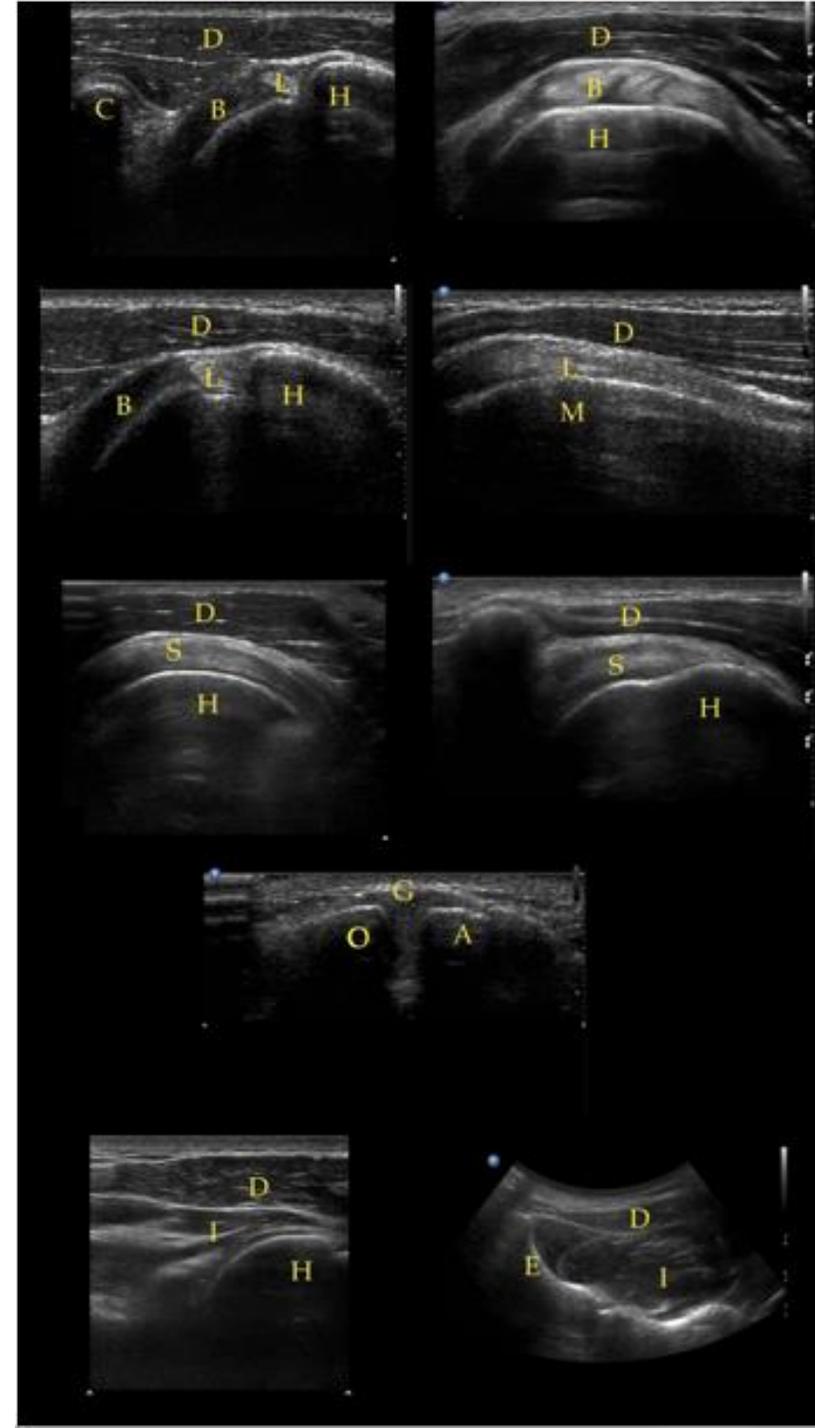
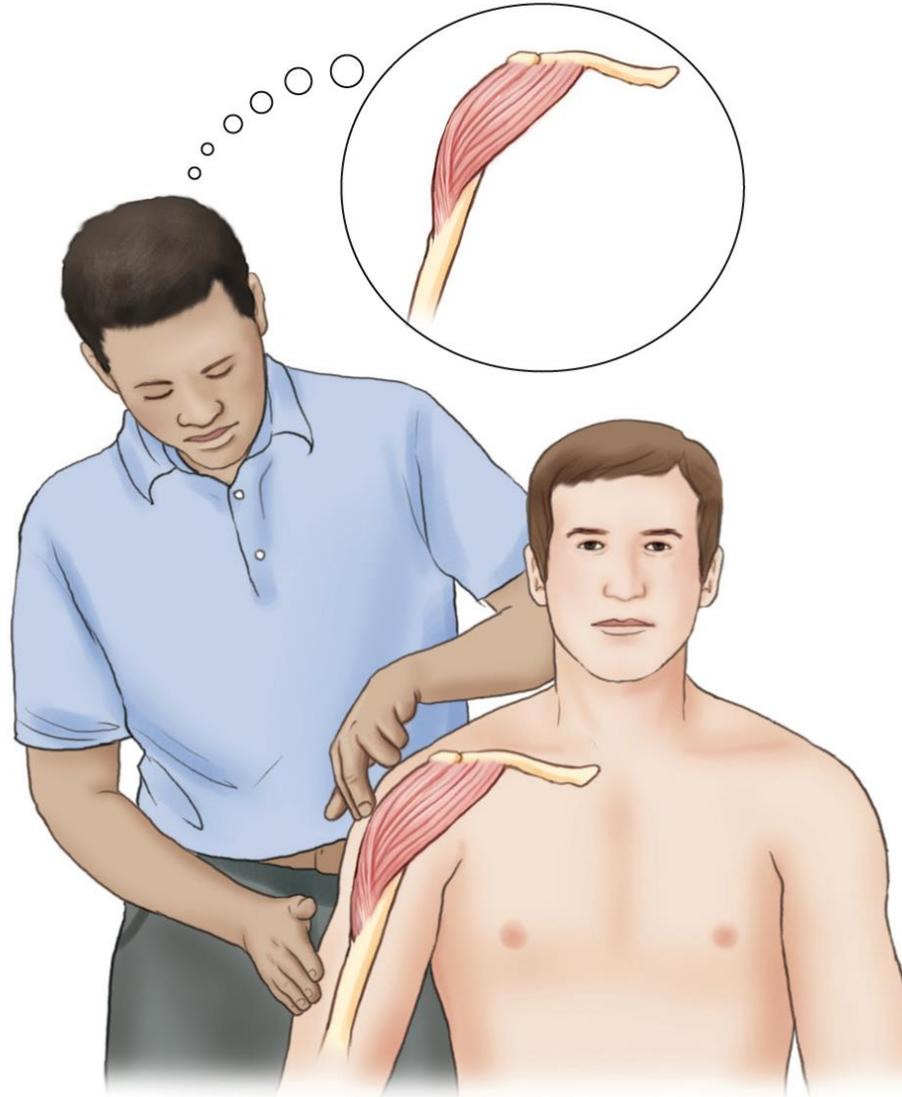
US understanding

What c

Palpation

Research

US understanding



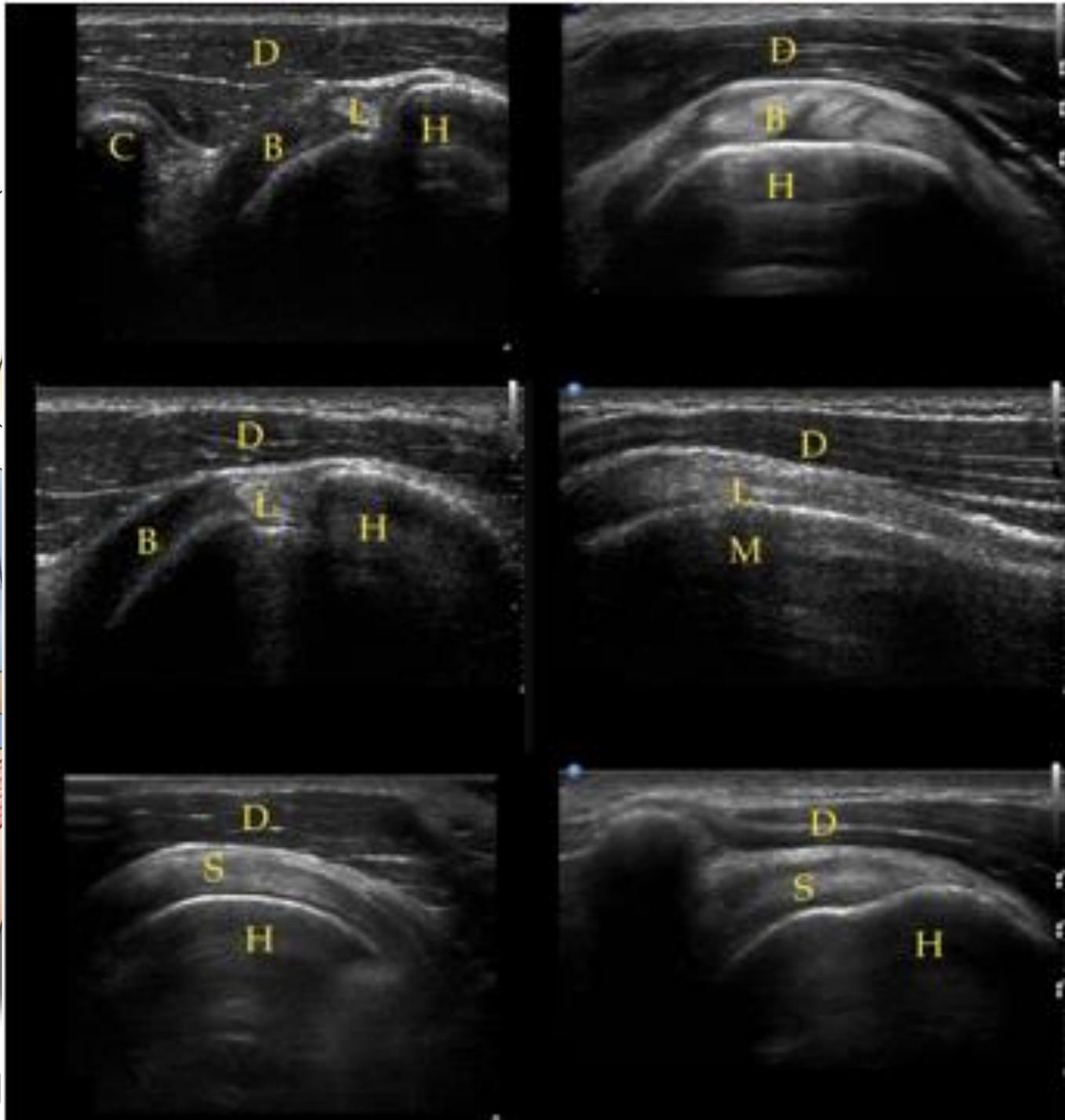
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What

Palpation

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US understanding



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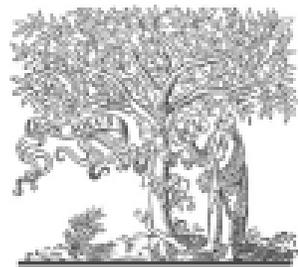
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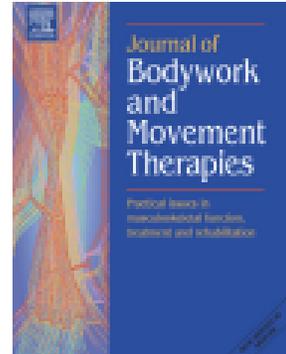


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This study suggests the possible use of the ultrasound and elastography to furnish a more objective picture of the “sensations” that are commonly reported by manual therapists, and which supports clinicians in the diagnosis of the myofascial pain.

Case study: Could ultrasound and elastography visualized densified areas inside the deep fascia?

Tuulia Luomala, PT^{a,*}, Mika Pihlman, PT^b,
Jouko Heiskanen, MD, PT^c, Carla Stecco, MD^d



Does the inter-osseous membrane fascial dysfunction exist? An observational study comparing palpation to ultrasound measurements

ABSTRACT

Background: There is a lack of evidence to support a correspondence between osteopathic palpation and anatomical findings. The concept of Fascial Dysfunction (FD) should be defined using more accurate words when describing palpatory findings if they could be explained by objective measurements. The forearm inter-osseous membrane (IOM) is a fascia often evaluated by osteopaths, searching for Fascial Dysfunction (FD). We measured IOM physical characteristics, such as elasticity and thickness, with ultrasound (US) and then compared it with osteopaths' FD assessment.

Methods: Healthy subjects were recruited and their forearms were marked every centimeter. At every mark, 3 registered osteopaths assessed the potential FD (none, moderate or strong). Assessments were compared to the IOM elasticity and thickness measured by US. A mixed effect model was used to analyse the link between thickness and FD and a chi-2 test for the link between elasticity and FD.

Result: 41 subjects were included. Mean age was 28.1, 46% were men. The average IOM length was 13.0 cm (± 1.5), the average thickness was 1.29 (± 0.41). The mixed model found a strong correlation between the grade of FD and the IOM thickness for all three osteopaths ($p < 0.01$). Moreover, correlations were found between thickness and elasticity of the IOM ($p < 0.001$).

Conclusion: Manual evaluation of FD seems to be correlated to physical properties of the IOM. Our results suggest that the forearm IOM is thicker at FD locations. This study needs replications on several anatomical areas and on the IOM of symptomatic subjects to confirm these findings. Moreover, research could focus on tissue changes after osteopathic treatment.



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Your feedbacks



Thank you !

Let's keep in touch : thomas.matthew@hotmail.fr

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RESEARCH / PALPATION

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