Current Treatment: Casting

Clubfoot is treated with serial casting. Despite being effective, comfort and efficiency might be improved.

Why Wait 1 Week

The tissues in a clubfoot adapt to the position of the cast. Normally the cast is changed weekly, but changing it more frequently decreases the treatment duration. So why wait one week?

Test: How Much Force

How much force does a practitioner apply to manipulate and correct a clubfoot?

We tested this question with an instrumented clubfoot model.

Goal: Dynamic Brace

How fast do the tissues in a clubfoot adapt to this force?

Next step is to determine the adaptation rate by placing force sensors underneath the cast.

We are developing a more efficient and user-friendly alternative treatment using a creep-based dynamic brace.

Safe Pressure for Fingers

0.50 N/cm²

Measured Pressure on Clubfoot

1.69 N/cm²