



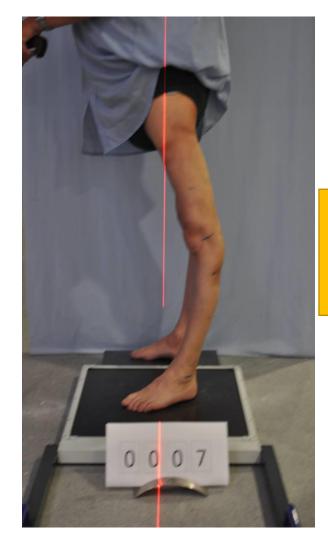


# ORTHOTIC COMPOSITES

KAFO SHORT SHORT COURSE 2018



# Problem: We take situations like this...



Try to avoid using hyperextended casts if at all possible

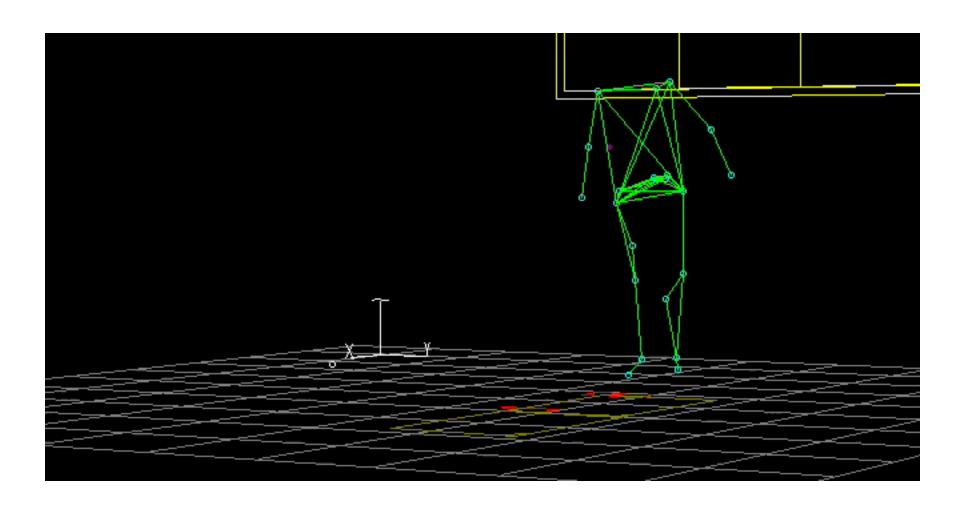


And ask a (Potentially) grumpy guy, 200 miles away to make this...

Be careful about 3/4 footplates if you are thinking about any form of GRF manipulation



# Or this...



To this...









# "Please make KAFO/AFO to cast"

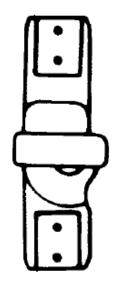
. . .

What other pertinent info should we receive?

Discuss ©

# Ring lock The oldest method for locking a simple hinge joint

Disadvantage
Needs two hands to open
Easily soiled
Wear and tear on clothing
The lock may get wedged too tightly



Advantage

The lock is secure if the lock ring is strong enough.

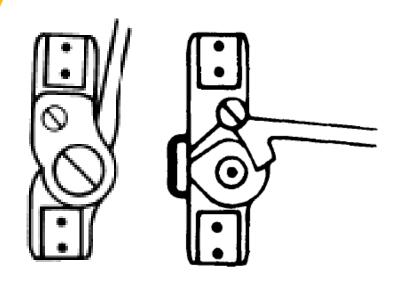
# Swiss/Bale (Covered) lock The most commonly used joint Bale is approx 40 years old

### Disadvantage

Can be operated by external influences

Wear

Accumulation of debris
Open (Swiss) can damage
clothing/fingers



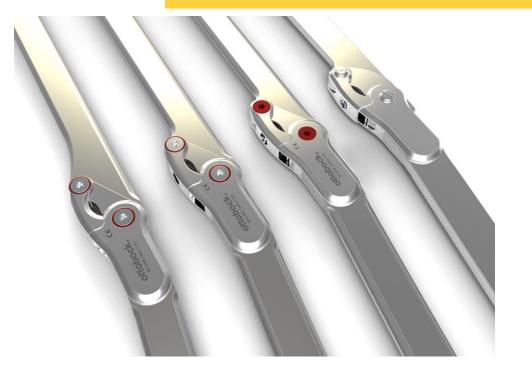
### Advantage

Function with one hand possible Smooth Function Can be opened under load

# Bar Lock The Strongest Lock

Disadvantages

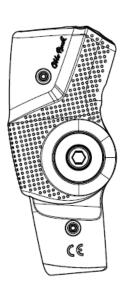
Need full extension to lock/unlock Long locking mechanism Can be influenced externally Advantages
Positive
Compression
Full Width Lock
Reduced wear



# Wedge Lock The latest type of Joint

Disadvantages

Need full extension to lock/unlock Long locking mechanism throw Locking surface wear Advantages
Positive
Improve
Clothing friendly
Stay clean





# Posterior Offset The most adaptable Joint

Disadvantages

Needs fuller assessment

Relies on GRF

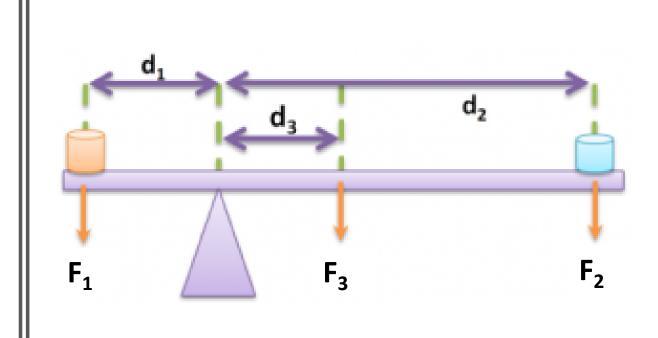
Differential motion

Increased torsion (potential)

Advantages
Normalised gait
GRF Reliant
Needs Full Ax
Lockable?

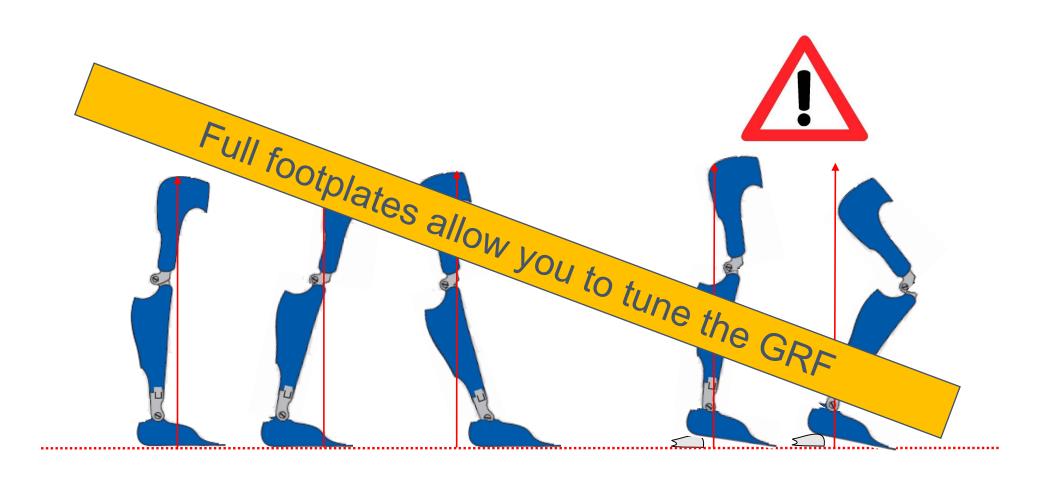


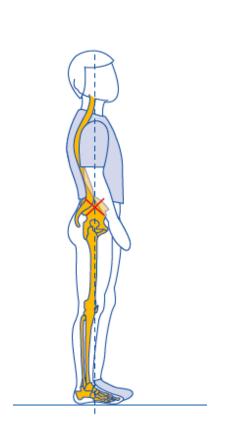
For every action there is an equal and opposite...

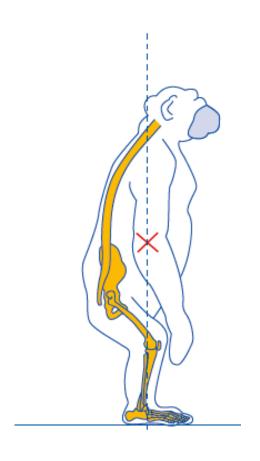


### Lasar Posture Time

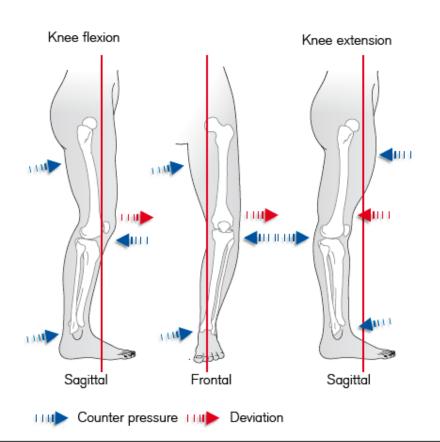
# Posterior Offset The most adaptable Joint



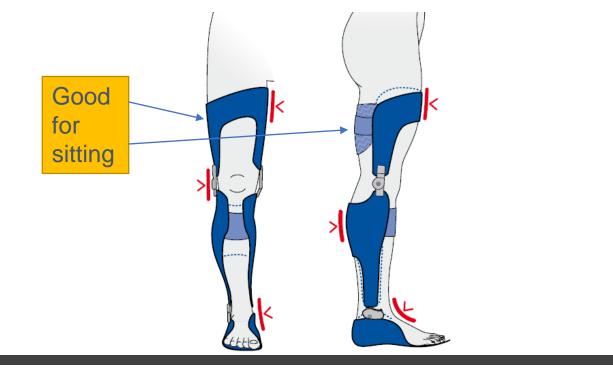




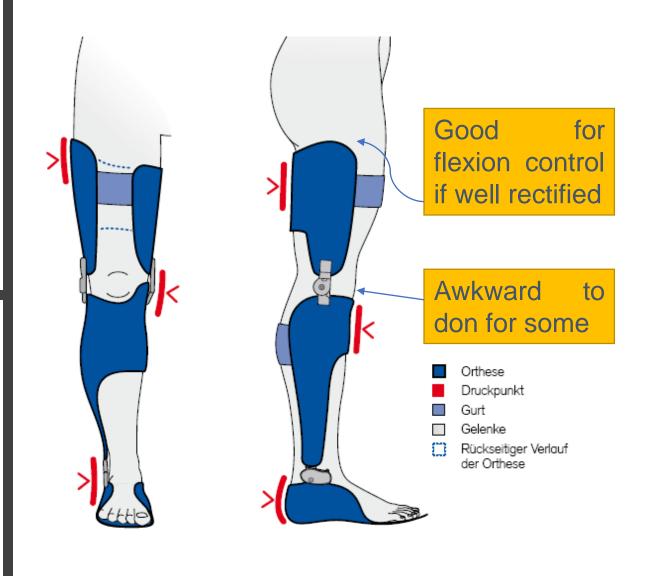
### Corrections in the frontal and sagittal plane



### Why is this Important?



Comfort, Habits and patient wishes are still important





### What does this slide show?

Shank Dependence/reflection
Toe Pitch
Waist
Raise

What does it show?

Why is this Important?

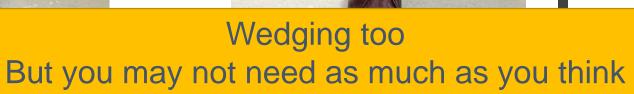


Frehery Mod...Roll up some plaster and put it cuboid notch







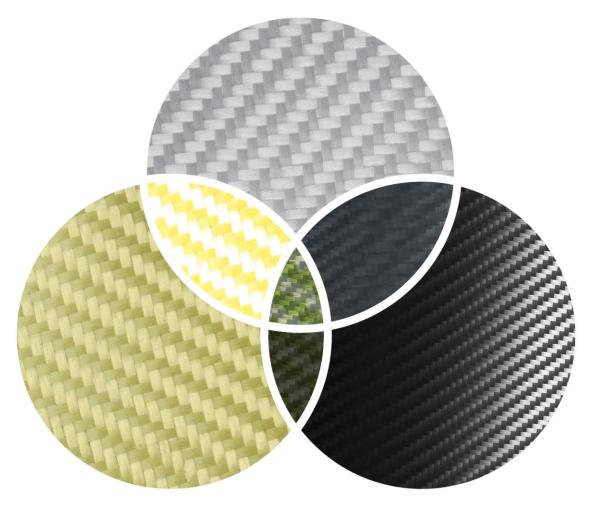


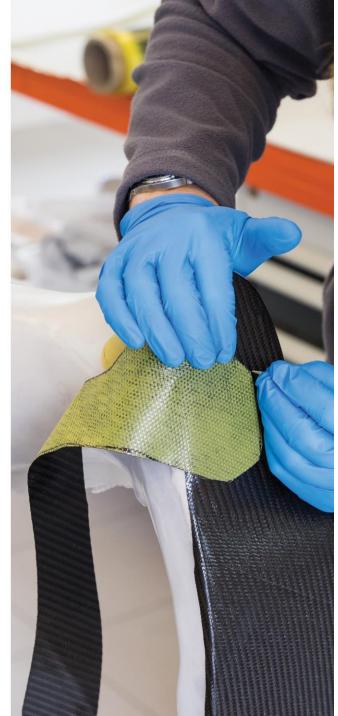




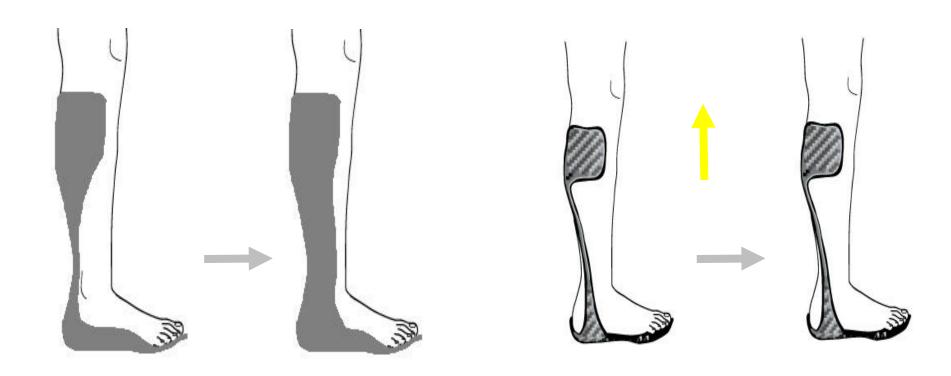


### **MIX IT UP**





### Trim Line Optimisation



### Summary Thoughts

Q & A



### Orthotic Education

& Training Trust



### ORTHOTIC COMPOSITES

KAFO SHORT COURSE 2018