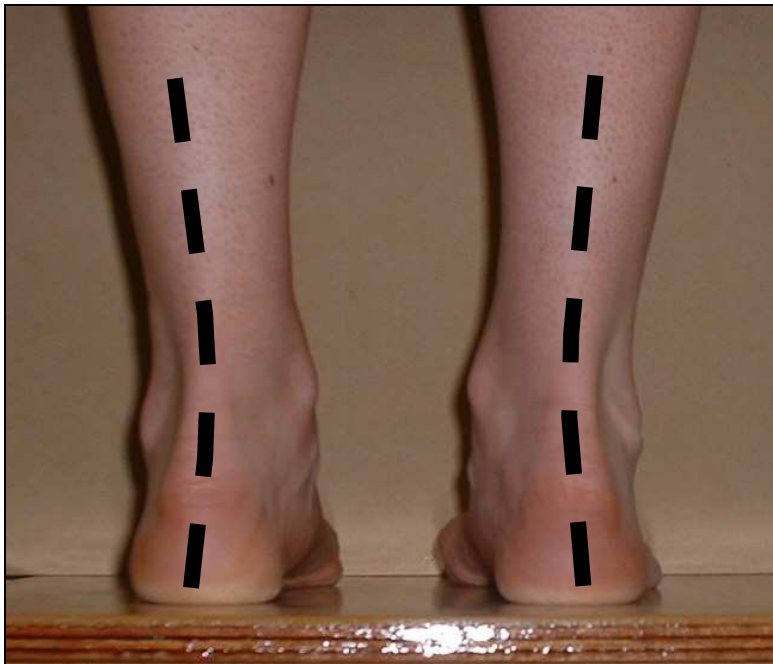




CASE STUDY- For more details contact Nick Dinsdale as above.

Name of Patient:	Female
Age:	
Sport / Occupation:	Mountain walking / circuit training
Level of Activity:	2 – 3 times weekly
Condition:	General lower limb fatigue & preventive action

BEFORE fitting customised carbon fibre orthotics – Dec. 2004



Reason / Symptoms:

The patient consulted me with regard to the possibility of fitting orthotics for preventive reasons. The patient occasionally suffers lower limb fatigue.

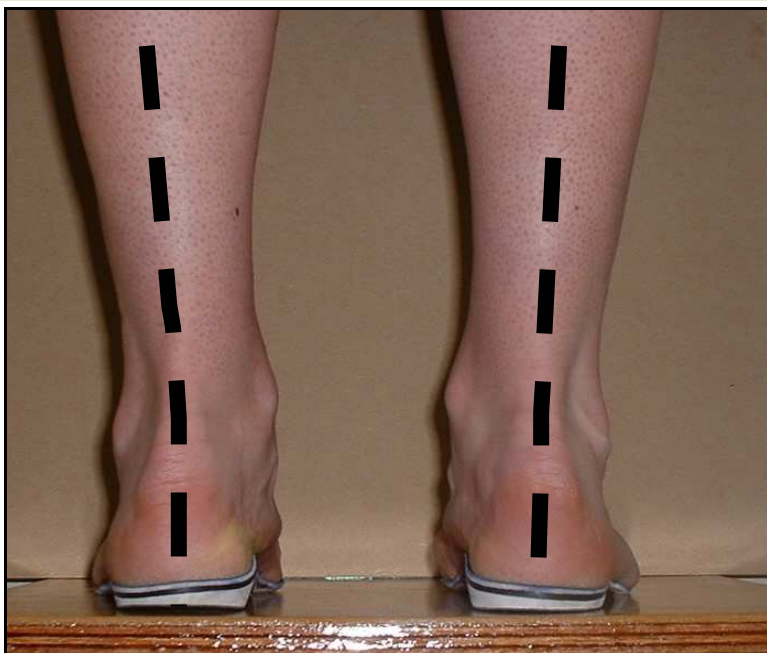
Biomechanical aetiology:

A major cause or contributing factor is bilateral excessive subtalar joint pronation (this is when the feet roll inwards). This adversely affects the biomechanics of the lower limbs with significant potential to cause overuse injuries and premature fatigue within the lower limb muscles.

Examination:

- Both medial longitudinal arches lowered.
- Excessive bilateral subtalar joint pronation between 7° – 9°.
- Formation of hard skin under 1st metatarsal heads due to abnormal loading.
- Moderate Hallux Valgus of right foot.

AFTER fitting customised carbon fibre orthotics – Dec. 2004



Agreed Treatment:

Custom carbon fibre orthotics were fitted, thereby improving the biomechanics of the lower limb. This was achieved by reducing excess pronation of the subtalar joint and controlling internal rotation of the legs.

Outcome:

After almost 4 months of wearing the orthotics for aggressive fell walking, the patient is well satisfied and has not suffered any problems. There has been a reduction in the formation of hard skin on the plantar surfaces; this is a result of an improved and more uniform distribution load bearing stresses. As a result of the improved lower limb biomechanics there should be long-term benefits owing to reduced stresses being placed on associated structures.