In adults on bed rest with a foot drop due to traumatic spinal cord injury does a timed application of a Passive Ankle - Foot Orthosis (PAFO) prevent adaptive shortening of gastrocnemius in comparison to daily passive stretching undertaken by a healthcare professional?

Clinical Bottom Line

No literature was found on the use of a Passive Ankle-Foot Orthosis (PAFO) in the use on patients on bed rest with a foot drop following acute spinal cord injury to answer this specific question.

Criteria for Critically Appraised Topic

***Population**:*	Male or female adults – 18 years or over Patients on bed rest with a foot drop following acute spinal cord injury/ compression / spinal surgery.
***Exclusions*:**	Children, spasticity, diabetic neuropathy
***Intervention*:**	A timed application of PAFO
Comparison:	No PAFO Daily passive stretching undertaken by a healthcare professional
Primary Outcome:	Prevention of adaptive shortening / contracture of Gastrocnemius muscle.
***Secondary outcomes**:*	Cost effectiveness Recovery of function

Databases Searched: Cochrane, Pedro, Medline, Amed, Cinahl, Embase, Rehabdata, OTseeker, NELH, Professional websites, Clinical Guidelines, NICE

Types of study included*:* Systematic Reviews, RCTs, English language

Time Frame: Past 10 years*:* 2000-2010

Search terms:
Acute spinal cord injury, acute spinal cord compression, spinal injury, Head injury, post-operative spinal surgery, Cerebrovascular accident (CVA), head injury stroke, foot drop, bed rest, immobilisation, non-ambulatory/ non-ambulant, passive ankle-foot orthosis, (PAFO) ankle-foot orthosis, foot orthosis, and passive stretches.

Available Evidence:

Database Searched (Specific to CAT)	Number of abstracts	Number of Relevant Abstracts
Amed	**0**	**0**
Embase	**4**	**0**
Cinahl	**0**	**0**
Clinical Guidelines	**2**	**0**
Cochrane	**0**	**0**
Medline	**1**	**0**
OTseeker	**2**	**0**
Rehabdata	**5**	**0**
Total	**14**	**0**

Results:

No articles were found to answer this specific question.

The search was opened up to include adults following a stroke (CVA) or head injury. Articles found were for the use of ankle-foot orthosis for adults during gait and were not appropriate to answer the clinical question.

Implications for practice:

There was no evidence available to support or not support the use of PAFO to prevent contracture of gastrocnemius in comparison to daily passive stretching.