

Action Statement 8:			
EFFECTIVENESS OF AFO OR FES TO IMPROVE GAIT KINEMATICS IN INDIVIDUALS WITH FOOT DROP DUE TO POST STROKE HEMIPLEGIA			
Action Statement	<p>Clinicians MAY provide AFO for individuals with ACUTE or CHRONIC post-stroke hemiplegia who have goals to improve ankle dorsiflexion (DF) at initial contact and during swing and loading response.</p> <ul style="list-style-type: none"> • Evidence quality: III • Recommendation strength: weak <p>Clinicians MAY provide FES for individuals with CHRONIC post-stroke hemiplegia who have goals to improve ankle DF at initial contact and during swing and loading response.</p> <ul style="list-style-type: none"> • Evidence quality: III • Recommendation strength: weak 		
Outcome Measures	Kinematics		
Evidence Summary	CLINICAL EFFECTS	AFO	FES
Acute AFO/FES (Level I= strongest level)	Immediate Effect	Level II	No evidence
	Therapeutic Effect	Level II	No evidence
	Training Effect	No evidence	No evidence
	Combined Effect	No evidence	No evidence
Evidence Summary		AFO	FES
Chronic AFO/FES	Immediate Effect	Level I	Level III
	Therapeutic Effect	No Evidence	Level II
	Training Effect	No evidence	No Evidence
	Combined Effect	Level II	No evidence
AFO compared to FES	Acute: No Evidence		Chronic: AFO = FES
Key Dose Considerations	<ul style="list-style-type: none"> • Research for dose parameters are not available. 		
Clinical Application/ Interpretations	<ul style="list-style-type: none"> • Both AFO and FES position the foot and ankle in a better position at initial contact and during swing. • There is minimal evidence for effects other than an immediate orthotic effect for both AFOs and FES for kinematic variables. • Significant ankle medial/lateral instability may lead to decreased effectiveness of FES during the stance phase. • Decreased quadriceps strength may lead to decreased stance-phase stability when using an AFO set in DF that also limits or prevents PF. • FES may decrease knee flexion during swing resulting in unwanted compensations such as hip hiking. 		

