

Spondylolysis Guideline

Individual patient circumstances may affect the guideline (Imaging, sport, recurrence, etc.)
Timelines will be *variable* between patients

Phase	Goals	Precautions/Restrictions	Treatment
Rest Phase 4-8 weeks	<ul style="list-style-type: none"> • Allow time for healing to occur • Control pain/inflammation • Maintain flexibility in UE/LE musculature • <i>Progress to phase I</i> when pain-free with activities 	<ul style="list-style-type: none"> • No active or passive lumbar extension • Consider bracing if symptomatic after 2-4 weeks of rest 	<ul style="list-style-type: none"> • Abdominal bracing • Stretching exercises for UE/LE musculature <ul style="list-style-type: none"> ○ Supine 90-90 hamstring stretch, Child's pose ○ latissimus dorsi stretch, anterior hip mobility, etc. • Cardiovascular: stationary bike
Phase I Time spent in phase +1-4 weeks	<ul style="list-style-type: none"> • Maintain pain-free ROM • Pain-free with daily activities • Progress stabilization to weight-bearing postures • Re-establish aerobic fitness • <i>Progress to phase II</i> when: <ul style="list-style-type: none"> ○ Normalized ROM ○ Hold bridge/side plank for 30 seconds with no pain ○ Maintain neutral spine with stabilization exercise 	<ul style="list-style-type: none"> • No active or passive lumbar extension 	<ul style="list-style-type: none"> • Address aggravating factors such as hyperextension/hypermobility, sport specific cause, etc. • Strength: Isometrics focused on gluteal and abdominals (neutral spine) <ul style="list-style-type: none"> ○ Bridges, clam, side planks, upright row with abdominal bracing • Manual therapy: segmental mobility above/below, soft tissue to paraspinals • Progress with flexibility of UE/LE musculature • Cardiovascular: stationary bike, deep water jogging if applicable
Phase II Time spent in phase +2-4 weeks	<ul style="list-style-type: none"> • Maintain pain-free ROM • Progress closed-chain strengthening throughout LE • <i>Progress to phase III</i> when: <ul style="list-style-type: none"> ○ Dynamic control with multi-plane activities ○ No increase in pain with sport-specific skills 	<ul style="list-style-type: none"> • Avoid back pain with start of lumbar extension AROM 	<ul style="list-style-type: none"> • Progress strengthening <ul style="list-style-type: none"> ○ Single leg bridges, Supine hamstring curls, Double-leg squat, Sit-up with medicine ball, etc. • Multi-planar strength progression with forward and lateral lunges • Progress balance and proprioceptive drills • Cardiovascular: progress towards sport demands, initiate swimming
Phase III Time spent in phase +2-6 weeks	<ul style="list-style-type: none"> • Initiate lumbar extension AROM if sport demands • Initiate impact loading such as jogging, running, landing • Progress to sport with: <ul style="list-style-type: none"> ○ No pain with impact loading such as jumping, running, cutting ○ Physician clearance 	<ul style="list-style-type: none"> • Avoid back pain with start of lumbar extension AROM • Monitor back pain with Olympic style weightlifting • Return to sport with physician clearance between 3-6 months 	<ul style="list-style-type: none"> • Progress dynamic movements with strengthening such as: lunges, body weight suspension exercises, deadlift • Gradual exposure to impact and sport specific activities • Return to running program • Cardiovascular: moderate to high intensity intervals on bike

This guideline is not meant to be prescriptive but a recommendation to the rehabilitation process. Progress may vary based on specifics of injury and procedure.