

Ankle Arthroscopy

Introduction

Surgery: Ankle Arthroscopy including Debridement, OS Trigonum excision, Lateral Ankle Repair, Repair of Osteochondral Lesions of Talus (OLT), Anterior Ankle Impingement

Indications for surgery: Pain, Reduced Function, Reduced ROM, Chronic instability,

Expected Length of Stay: Day-case

Surgeons: Mr McKinley, Mr Shalaby, Mr Amin

Expectations

Expectations of surgery: pain relief, resolution of instability, return to sport

Scope of practice

These guidelines are designed to guide physiotherapists when treating patients following this surgical procedure. They were produced by a process of systematic review of the current evidence-based literature, medical and peer consultation. They were correct at the time of writing. They are general guidelines and any specific instructions in the post-operative notes must take precedence. They are not a substitute for sound clinical reasoning and good communication with the consultant team, and patients should always be treated on a case-by-case basis.

Aim

The aim of these guidelines is to provide physiotherapy staff with a series of recommendations from the current evidence base to assist them in the management of patients who have undergone this surgical procedure.

Literature review question

What is the current best-practice rehabilitation protocol for patients who have undergone ankle arthroscopy to enable optimal return to function and sport?

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Search Process

Appraisal process: The databases below were searched between 1st April 2020 and 1st April 2025. The titles and abstracts of all identified studies were assessed to determine whether they were pertinent to the research question.

Total number of articles returned: 1487

Total number of articles selected: 31

CASP checklists used: Systematic Review Checklist, Randomised Controlled Trial (RCT) Checklist, Cohort Study Checklist

Databases:

Data Base	Dates	Limitations
Medline	April 2020 – April 2025	English
Cinhal	April 2020 – April 2025	English
Pedro	April 2020 – April 2025	English
Science Direct	April 2020 – April 2025	English
Cochrane	April 2020 – April 2025	English

Inclusion/ Exclusion Criteria:

Inclusion criteria: Studies reporting on rehabilitation or post-operative outcomes following arthroscopic ankle procedures (including systematic reviews, randomised controlled trials, and observational studies), published in English.

Exclusion: Studies concerning open surgery; Studies not written in English. Expert opinion pieces and single-case case studies were excluded.

Key Words:

Ankle AND "arthroscopy" OR "keyhole-surgery" OR "Keyhole surgery" OR "OLT" or "Osteochondral Lesions of Talus" or "OS Trigonum"	AND
	Physiotherapy AND/OR
	"physical therapy" AND/OR

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	Rehabilitation AND/OR
	post-operative AND/OR
	Post-surgery AND/OR
	Protocol

Results

This guideline was developed by a single clinician using a structured review of the available literature and peer consultation. Given service and time constraints, formal dual-reviewer appraisal was not undertaken. The rehabilitation evidence base following ankle arthroscopy remains limited and heterogeneous; therefore, recommendations reflect a combination of current evidence, peer consensus and accepted best practice. Clinical judgement and individualised care remain central to implementation.

Recommendations

- Initial weightbearing status and use of protection (moonboot/ankle brace) is usually on a case-by-case basis dependent on procedure(s) undertaken, surgical technique and consultant discretion. Due to the variety of ankle arthroscopy surgeries, early-phase management may differ between techniques.
- Early weightbearing/WBAT in moonboot appears safe and can improve short-term outcomes of ROM and Pain following lateral ankle surgery. No difference in long-term outcomes.
- Formal physiotherapy can typically begin at 2 weeks
- Always follow the surgeon's post-operative instructions; any queries should be directed back to the surgeon. Due to the variety of ankle arthroscopy surgeries, timescales are approximate. Progression through phases should be guided by minimal swelling, resolution of pain and good muscle recruitment. Key stages of rehabilitation were identified in the literature as described below.

Phase 1 – Initial Recovery/Early Loading: 0-4 weeks

Precautions/ specific post op instructions:

- Confirm weightbearing status and any specific restrictions i.e. inversion/eversion

Goals	Recommendations	Grade of evidence
Reduce pain and swelling	Relative rest, POLICE	C
Increase ROM	AAROM and AROM all movements unless otherwise directed	A
Gait re-education	As indicated	C

Phase 2 – Early/intermediate loading: 4-12 weeks

Precautions/ specific post op instructions:

- Initially may still have some restrictions on ROM – likely eversion/inversion

Goals	Recommendations	Grade of evidence
Continue to normalise ROM	AROM and introduction of PROM if indicated.	A
Continue with gait re-education	If combined e/c and moonboot/brace – likely preferable to move onto moonboot/brace only first and then unaided.	C
Strengthening Ankle	Progressive strengthening programme for whole ankle as tolerated. Compound LL strengthening exercises.	A/B
Improve Balance	Proprioceptive training	A/B

Phase 3 – Advanced loading/RTS training: 12+ weeks

Return to sport training can commence provided any laxity and pain have disappeared, there is no ROM limitation, and sufficient strength and balance has been obtained (Sign Grade C). Consider using strength/endurance markers e.g. single leg heel raise and

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single leg squat endurance test prior to beginning plyometrics and sport specific training.

Average reintroduction of RTS-type exercises is from 12/52 (Sign Grade A)

Goals	Recommendations	Grade of evidence
Improve plyometric ability	Gradual introduction of progressive plyometric LL exercises	A
Reintroduction of running	Use appropriate graded protocol i.e. couch to 5k	A
Return to sport	Practice sport specific movements/drills	A

Phase 4 – Return-to-Sport

- Average time in the literature for RTS is 4-6/12, these are generally trained individuals.
- High level of previous athletic ability, health status and younger age are the best predictors of successful RTS.
- Use of patient reported outcome measures such as the Lower Extremity Functional Scale (LEFS) or Foot and Ankle Ability Measure (FAAM) should be considered prior to RTS.

Goals	Recommendations	Grade of evidence
Achieve comparable outcomes to unaffected side on testing (above 90%)	Strength/endurance: Single heel-raise endurance test, single leg squat endurance test, Y balance test, isotonic leg press Power and agility: Use of hop, triple-hop, crossover-hop, side-hop test. Successful return to sport specific practice drills	D

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Systematic Reviews

	Sign Grading
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RCT

	Sign Grading
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