Taping & Bracing

How External Support Can Help During Recovery

1 Why Tape and Braces Are Used

Tape and braces are external support tools — useful adjuncts to rehabilitation, not fixes on their own. They serve three main purposes: pain relief (through neurological effects and offloading), movement restriction (to protect healing tissue), and proprioceptive input (improving joint position sense).

Purpose	How It Works	When It's Used
Pain relief	Reduces load on painful structure; may stimulate skin mechanoreceptors to modulate pain signals	Plantar fasciitis, patellofemoral pain, Achilles, tendinopathies
Movement control	Physically limits end-range movement to protect healing tissue	Ankle sprains, ligament injuries, post-surgical rehab
Proprioceptive support	Tape/brace stimulates skin and joint receptors, improving position sense	Chronic ankle instability, hypermobility, post-injury return to sport
Offloading	Redistributes load away from injured structure	Stress fractures, fat pad syndrome, plantar plate injuries
Postural correction	Gentle repositioning of joint alignment	Patellofemoral tracking, foot pronation taping

2 Types of Tape

Type	Properties	Best Used For	How Long to Wear
Rigid sports tape (zinc oxide)	Non-stretch; maximum support	Ankle sprains, acute protection	During activity; remove after; max 24–48 hr
Kinesiology tape (e.g. Kinesio, RockTape)	Elastic; lifts skin slightly	Pain relief, proprioception, oedema reduction	3–5 days; shower-proof
Low-dye / arch taping	Rigid; supports medial arch	Plantar fasciitis, PTTD, tibialis posterior pain	During activity; remove at night
Calcaneal taping	Rigid; repositions heel fat pad	Heel fat pad syndrome, insertional Achilles	During activity

McConnell tape	Rigid + foam; repositions patella	Patellofemoral pain syndrome	During activity and exercise
Cohesive bandage (Co-ban)	Self-adhesive; light compression	Oedema, mild support	During day; remove at night

3 Types of Braces and Supports

Brace Type	What It Does	Best Conditions	Limitation
Lace-up ankle brace	Restricts inversion/eversion; proprioceptive input	Ankle sprain return to sport; chronic instability	Does not replace rehab; reduces long-term proprioception if used permanently
Hinged knee brace	Controls range of motion; ligament support	ACL/MCL injury; post-surgical	Bulky; may not fit all footwear
Patellar tendon strap	Offloads patellar tendon at insertion	Patellar tendinopathy; Osgood-Schlatter	Symptomatic relief only — does not treat underlying cause
Night splint (dorsiflexion)	Maintains stretch on plantar fascia / Achilles overnight	Plantar fasciitis; Achilles tendinopathy	Takes time to adjust to sleeping; most effective for first-step pain
Walking boot / CAM boot	Offloads foot/ankle completely	Stress fractures; severe tendinopathy; post-surgical	Not for long-term use; leads to calf weakness and deconditioning
Compression sleeve	Reduces swelling; mild proprioceptive input	General oedema; early return to activity	Not a substitute for compression hosiery in CVI

4 What Tape and Braces Can and Cannot Do

Tape and braces manage symptoms and protect healing tissue — they do not repair what is injured. The goal is always to use external support as a bridge while your rehab programme builds the strength, control, and tissue capacity to no longer need it.

They CAN	They CANNOT
Reduce pain enough to allow exercise	Repair a tendon, ligament, or bone
Protect a healing ligament during early return to sport	Replace the strength and control built through rehab
Improve proprioception in an unstable joint	Permanently correct alignment or posture
Offload a painful structure temporarily	Prevent re-injury if used instead of (not alongside) rehab

Reduce swelling when applied correctly	Be worn indefinitely without reducing natural joint stability

5 Practical Guidance

Situation	Guidance
Skin reaction to tape	Remove immediately; allow skin to recover; try hypoallergenic tape alternatives; apply barrier spray pre-taping
Tape feels too tight / tingling / colour change	Remove immediately — may be compressing circulation
How long to use a brace	As short a time as necessary — wean off as strength and confidence improve; permanent brace use without rehab leads to dependency
DIY vs clinician-applied	Kinesiology tape can be self-applied for simple applications; rigid strapping for injury protection should be applied or taught by a clinician
Taping vs orthotics	Taping provides temporary evidence of likely orthotic benefit — if taping the arch relieves symptoms, a custom orthotic is likely to help

6 Key Takeaways

KEY TAKEAWAY 1

External support is a bridge, not a destination. Use tape or bracing to manage pain and protect tissue while your rehabilitation builds the strength and control to make external support unnecessary.

KEY TAKEAWAY 2

The best evidence for taping is in plantar fasciitis (low-dye), patellofemoral pain (McConnell), and ankle instability (lace-up brace for return to sport). For these conditions, taping genuinely adds value alongside exercise.

KEY TAKEAWAY 3

If arch taping significantly relieves your foot or lower limb pain, this is strong evidence that a custom orthotic would provide similar or better benefit over the longer term — discuss this with your clinician.