

RETURN TO PERFORMANCE FOLLOWING ANTERIOR SHOULDER DISLOCATION IN A GOALKEEPER: A CASE STUDY

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Introduction

Anterior shoulder dislocations are among the most common traumatic injuries in young athletes, with evidence indicating a high prevalence and recurrence rates between 40% and 50% [1]. In soccer, particularly for goalkeepers, the shoulder is exposed to high-demand actions such as diving, overhead reaching, and forceful hand contacts. These repetitive stresses increase the load on the glenohumeral joint and may contribute to instability episodes, which can significantly impact career progression [2]. While many published return-to-play (RTP) frameworks focus on post-operative pathways, evidence demonstrates that non-operative management can also support a successful RTP when guided by structured, progressive rehabilitation principles [3].

Case Report

HT, a young goalkeeper (age 18, height 188 cm, weight 82.5 kg, BMI 23 kg/m²), sustained a first-time traumatic anterior dislocation of his right shoulder during a diving action while playing. For HT, soccer represents not only his passion but also his career aspiration and personal dream of competing at the collegiate and professional level. The injury posed both a physical and emotional challenge, affecting his confidence and causing concern about his future. He attended A&E for reduction and was placed in a brace. MRI revealed a Hill-Sachs lesion and a fibrous Bankart lesion, with no associated fractures. HT presented to Isokinetic Medical Group (London) with marked apprehension and functional limitations, including restricted range of motion (ROM) and muscle activation. Rehabilitation at Isokinetic began after the acute phase and followed a stage-based structure organised into Early-, Mid-, and Late-stage rehabilitation, concluding with a progressive RTP continuum. Four rehabilitation environments were implemented: Gym-based rehabilitation (29 sessions), Hydrotherapy (5 sessions), Green Room (movement analysis and retraining room) (5 sessions), and On-Field rehabilitation (OFR) (3 sessions). In the Early stage, the primary goals were to restore joint homeostasis, progressively recover shoulder ROM, address neuromuscular inhibition and re-establish coordinated scapulothoracic function. Secondary aims included maintaining general fitness and providing psychological support during the early period of instability. These objectives were achieved through a combination of manual therapy, passive and active mobility work, low-intensity strengthening exercises, and hydrotherapy sessions emphasising controlled mobility and cardiovascular maintenance. The Mid-stage phase focused on progressive strength recovery, upper-limb (UL) and trunk conditioning, and movement-quality retraining. Gym-based rehabilitation targeted hypertrophy and UL strength, while integrating kinetic-chain strategies and controlled plyometrics. Hydrotherapy facilitated exposure to perturbations and closed-chain stability challenges, bridging toward higher-impact drills performed later in the Green Room and on the field using real-time feedback. In the Late-stage, gym-based strength and power training were combined with sport-specific OFR. The primary aims were restoration of movement quality, dynamic stability during high-speed actions, and reintroduction of goalkeeper-specific tasks such as diving, landing, overhead reaching, shot-stopping, and high-ball collection. Training loads were monitored using GPS and progressively increased to match competitive demands. Throughout the rehabilitation, HT was closely monitored by a multidisciplinary team and assessed using a comprehensive testing battery, including shoulder strength, neuromuscular control, movement analysis tests, and field-based sport-specific performance tasks, to guide clinical decision-making (see Tables 1 and 2). HT successfully RTP and achieved his goal of securing a scholarship with the Adelphi University (USA) men's soccer programme, where he is currently part of the starting eleven.

Conclusions

This clinical case illustrates how an evidence-informed, stage-based, and criteria-driven rehabilitation framework, delivered through a multidisciplinary approach and grounded in the bio-psycho-social model, supported the successful recovery of a young goalkeeper following a first-time anterior shoulder dislocation managed conservatively, enabling a safe return to performance. Beyond physical recovery, HT regained his confidence, resilience, and emotional readiness, empowering him to pursue his dream and achieve a scholarship.

Neuromuscular Performance	RIGHT		LEFT		Limb Comparison RIGHT Vs LEFT
	Absolute	Relative (N/Kg)	Absolute	Relative (N/Kg)	
90° External Rotation	213.3	2.6	210.3	2.5	+1.4%
90° Internal Rotation	211.8	2.6	199.0	2.4	+6.4%
Extension (pushing down)	170.0	2.1	132.3	1.6	+28.5%
Flexion (pushing up)	126.0	1.5	113.5	1.4	+11.0%
Abduction (pushing out)	147.0	1.8	137.5	1.7	+6.9%
Push up (going up forces)	332.0	4.0	342.0	0.0	-2.9%
Push up (landing forces)	604.0	7.3	557.0	0.0	+8.4%

Table 1. Summary of Strength and Power Assessments performed

TEST RESULTS						
MOVEMENT	Limb Stability	Pelvis Stability	Trunk Stability	Shock Absorption	Movement Strategy	TOTAL
Single Leg Squat	2	2	1	-	1	6
Drop Jump	2	-	-	2	2	6
Lateral Landing	2	-	2	-	2	6
Deceleration	2	2	1	2	2	9
Single Leg Hop	2	1	2	2	2	9
Cut Manoeuvre	2	0	2	2	2	8
FINAL SCORE (%)						88

TEST RESULTS						
MOVEMENT	Limb Stability	Pelvis Stability	Trunk Stability	Shock Absorption	Movement Strategy	TOTAL
Single Leg Squat	2	1	1	-	1	5
Drop Jump	2	-	-	2	2	6
Lateral Landing	2	-	0	-	2	4
Deceleration	1	1	1	2	2	7
Single Leg Hop	1	1	1	2	2	7
Cut Manoeuvre	2	0	0	2	2	6
FINAL SCORE (%)						70

Table 2. Results of Bilateral Movement Analysis Testing (Left and Right sides)

References

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