Vol.4 | Issue 3 June 2025

IAS NEWSLETTER

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In this issue

Message from the President

Dear Colleagues,

It gives me great pleasure to welcome you to the relaunch of our vibrant monthly newsletter!

Amidst this dynamic phase of growth and transformation, it became clear that our Society needed a powerful and regular platform to share, educate, and inspire. This initiative aligns perfectly with our theme of "Bridging the Boundaries."

We are proud to be led by our newly elected office bearers, who bring fresh energy, innovative ideas, and a unified vision. As we move ahead, it is evident that the collective efforts of our members and leadership can take us farther than ever before.

The year 2025 marks an exciting chapter for us on the international front. Our collaborations with ESSKA and ESSMA are gaining momentum, offering new opportunities for global exposure and meaningful academic exchange—connecting Indian arthroscopy to the world stage.

This newsletter will be much more than just updates. It will be a dynamic platform:

- A chronicle of our achievements
- A voice for our aspirations
- A vibrant resource for education, inspiration, and growth

On behalf of the Indian Arthroscopy Society, I warmly invite each one of you to be an active part of this new journey. Let's make this newsletter a true reflection of the extraordinary energy, expertise, and enthusiasm that defines IAS.

Jai Hind!

Warm regards,

Prof. Arumugam S.

President, Indian Arthroscopy Society

Pan-labral Tear following Traumatic First-Time Shoulder Dislocation: Arthroscopic Management and Literature Review

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Abstract

Background

Pan-labral tears are typically seen in patients with recurrent shoulder dislocations. However, their occurrence following a first-time dislocation is rare and often underreported. Even with MRI, such injuries can be missed in the acute setting, making arthroscopic evaluation crucial for accurate diagnosis and treatment.

Case Report

A 27-year-old male experienced pain and restricted movement in his left shoulder after a single episode of anterior shoulder dislocation while playing cricket. Initial radiographs were normal, and MRI showed a pan labral tear. Arthroscopic assessment confirmed the pan-labral tear. Repair was performed using arthroscopic techniques under general anaesthesia. The patient achieved complete recovery with restoration of shoulder function.

Conclusion

This rare case highlights that pan-labral tears can occur even after a first-time dislocation of the shoulder. Arthroscopic evaluation is essential for diagnosis and effective repair, especially when imaging is inconclusive.

Case Report

Background

Glenoid labral tears are a common cause of shoulder instability and pain and are generally categorized into superior labral tears (SLAP lesions), anterior labral tears (Bankart lesions), and posterior labral tears (reverse Bankart lesions) [1]. The superior and anteroinferior regions of the labrum are particularly prone to injury, with SLAP lesions originally described by Andrews et al. as posterosuperior tears extending anteriorly [2]. Snyder et al. further categorized SLAP lesions into four types, with type II being the most frequently encountered [3]. Combined injuries involving the superior and anterior labrum, including SLAP-Bankart variants, have been previously reported [4], and more recently, several complex combinations of labral injuries have been recognized [5,6].]

Among these, Powell et al. expanded the SLAP classification by introducing type VIII and type IX lesions, the latter representing a circumferential or pan-labral tear involving the entire labrum [7]. The 360° labral tears traditionally associated with recurrent dislocations, there is evidence suggesting that such extensive tears can also result from a single traumatic episode [8]. Circumferential labral tears may be underdiagnosed due to their subtle presentation and limitations in imaging. As such, a detailed history, meticulous clinical evaluation, and a high index of suspicion are essential for diagnosis [5]. Arthroscopic assessment remains the gold standard for definitive identification. Arthroscopic repair of pan-labral tears has demonstrated favorable outcomes in restoring joint stability and function [8].

This report presents a rare case of a pan-labral tear in a young athlete following a first-time shoulder dislocation. Arthroscopic repair led to a successful recovery, and emphasizing its rarity and clinical relevance.

Case Presentation

A 27-year-old right-hand dominant male presented with persistent left shoulder pain and restricted motion following a single anterior shoulder dislocation sustained while playing cricket. He denied any previous shoulder injuries, dislocations. Clinical examination revealed no visible muscle wasting. Pain was elicited during both active and passive abduction and flexion movements. There was no soft tissue laxity , O'Brien,apprehension tests were positive, and mid-range instability was present. The neurological assessment revealed intact strength and sensation in the upper limb.

Initial radiographs were unremarkable (Fig. 1A). However, MRI demonstrated an anteroinferior labral tear with no evidence of rotator cuff pathology (Fig. 1B and C). Given the clinical suspicion of a more extensive injury, diagnostic and therapeutic arthroscopy was planned.

Under general anesthesia, a comprehensive arthroscopic evaluation was performed. Inspection revealed a circumferential (360°) labral tear involving the anterior, posterior, superior, and inferior glenoid (Fig. 2). The superior-anterior labrum and biceps anchor tear were addressed first. An accessory anterior-superior lateral portal was created using an outside-in spinal needle technique, taking care to preserve the supraspinatus tendon. The supraglenoid tubercle was prepared with a barrel burr to enhance suture anchor fixation.

Repair was carried out meticulously using multiple portals and percutaneous techniques. Anchors were strategically placed to restore the labrum and biceps anchor complex with proper tension and anatomical alignment (Fig. 3). The procedure concluded with a subacromial bursectomy, wound closure, and application of a shoulder immobilizer. Postoperative recovery was uneventful, and the patient was discharged on the second postoperative day.

Discussion

Combined glenoid labral injuries involving multiple quadrants represent a distinct pathological pattern within the glenohumeral joint [1,9]. The “circle concept” of shoulder instability provides a biomechanical explanation for such circumferential tears, suggesting that instability in one direction is often accompanied by a compensatory lesion on the opposite side, for example, anterior instability with a concurrent posterior labral injury [10].

Although these circumferential labral tears are typically linked to recurrent shoulder dislocations, they can also result from a single traumatic event, challenging the assumption that repeated instability is necessary for such extensive damage [11]. MRI, while commonly employed for preoperative evaluation, has limited sensitivity in detecting pan-labral injuries [12]. This underscores the need for a thorough clinical assessment, including detailed history, physical examination, and high-quality imaging, to guide surgical planning.

Clinicians must maintain a high index of suspicion even after a single dislocation episode, especially when patients report persistent pain and limited motion despite normal radiographs. Such presentations may conceal a pan-labral lesion, which, if left untreated, can progress to chronic instability and ultimately lead to degenerative changes and painful glenohumeral osteoarthritis [13]

Conclusion

Circumferential glenoid labral tears, though commonly linked to recurrent shoulder dislocations, can also arise following a single traumatic event. Emerging evidence challenges the traditional assumption that the extent of labral injury correlates directly with the frequency of dislocations. Given the limitations of MRI in detecting pan-labral tears, a thorough clinical evaluation complemented by diagnostic arthroscopy is essential for accurate diagnosis. When identified, arthroscopic repair of these extensive labral injuries has been shown to produce excellent clinical outcomes, restoring stability and function in affected patients.

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Figure 1: 1A- pre-operative radiograph of left shoulder joint not showing any significant abnormality. MRI left shoulder: 1B-Axial, and 1C- coronal, Fat-suppressed T2-weighted image showing tear of the anteroinferior labrum.

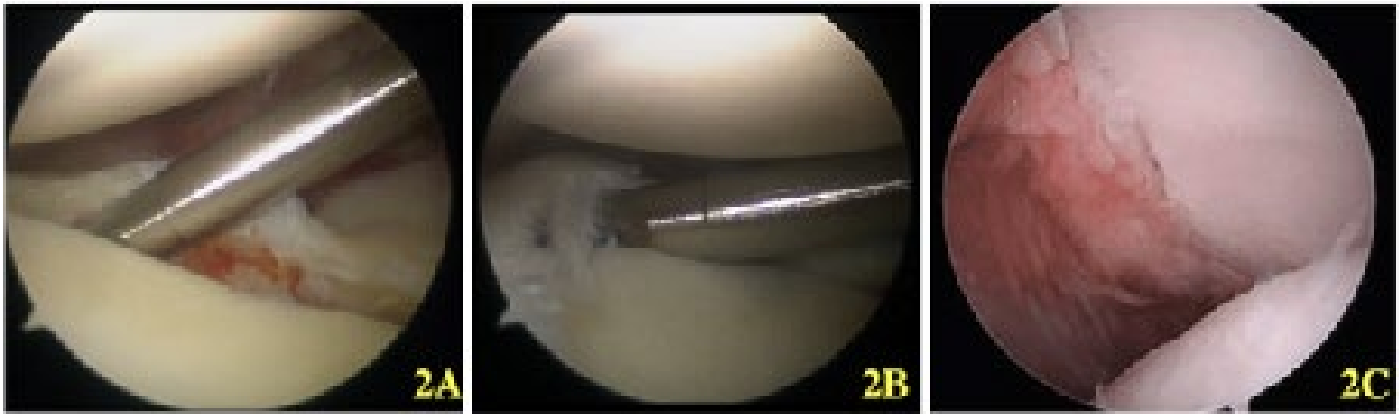

Figure 2: 2A-Intraoperative arthroscopic image showing anterior labral detachment from glenoid. 2B-Intraoperative arthroscopic image showing inferior labral tear. 2C-Intraoperative arthroscopic image showing posterior labral detachment.

Figure 3: Post-operative arthroscopic image showing repaired labrum with suture anchor.

Bridging the Gap: Knotless Suture Anchor Repair of Acute ACL Femoral Avulsions

Dr. Sridhar Gangavarapu

Dr. Konangi Chakradhar

Introduction

The concept of primary ACL repair, first pioneered in the early 20th century [1], was largely abandoned due to inconsistent outcomes until recent advances in diagnostic imaging and surgical techniques revived interest in this approach. Sherman's classification system [1,3] identified proximal avulsion tears (Type 1) as particularly amenable to repair, sparking renewed clinical investigation. While midsubstance ACL tears remain more common in adults, children frequently experience femoral avulsions due to the relative strength of their ligaments compared to developing bone [2].

Modern MRI allows precise identification of these injury patterns [3], and arthroscopic techniques now enable selective repair of acute femoral avulsions in adults with preserved tissue quality [3,4]. This case report describes an adult patient with a Sherman Type 1 ACL avulsion treated with arthroscopic knotless anchor repair combined with MCL reconstruction, illustrating how individualized treatment strategies can address complex knee injuries while preserving native anatomy.

case presentation

A 34-year-old female presented with persistent left knee pain and instability following an injury during recreational volleyball. Initial management at an outside institution involved four weeks of immobilization in an above-knee cast, which resulted in significant motion restriction and quadriceps atrophy.

The patient underwent an intensive two-week preoperative rehabilitation program consisting of daily physiotherapy focused on patellar mobilization and quadriceps reactivation, combined with progressive range-of-motion bracing. This intervention successfully restored full knee mobility, with flexion improving from 0-90° to 0-135° and complete resolution of the extension lag. Clinical examination revealed grade III Lachman laxity with a soft endpoint, grade III valgus instability at 30° of flexion, and a stable posterior drawer. MRI findings confirmed a complete femoral ACL avulsion with preserved ligament integrity, near total MCL tear and characteristic bone marrow edema in the lateral compartment consistent with the valgus injury mechanism [2,3].

Surgical Technique

The procedure began with the patient positioned in the leg-hanging configuration using a thigh tourniquet and lateral post. Diagnostic arthroscopy through standard anterolateral and anteromedial portals confirmed the complete femoral ACL avulsion with excellent tissue quality at both the avulsed end and tibial insertion, along with intact menisci and articular surfaces.

For the ACL repair, the avulsion site was meticulously prepared by debriding to bleeding bone with microfracture awl. Two #2 FiberTape sutures were passed in a locking-loop configuration through the proximal ACL stump to ensure secure tissue purchase. A knotless Pop-Lock 4.5 mm suture anchor was then placed at the anatomic femoral footprint through an accessory medial portal, with the sutures tensioned at 30° of flexion while applying posterior drawer force to restore physiologic laxity.

Concurrent MCL reconstruction was performed using peroneus longus autograft harvested through a small incision. MCL isometric points identified on both femoral and tibial side, Fluoroscopic guidance ensured accurate tunnel placement, with the femoral insertion at the medial epicondyle and tibial insertion approximately 15-20mm below the joint line. The graft was secured at both ends with knotless suture anchors after confirming appropriate tension.

Final arthroscopic evaluation demonstrated anatomic reduction of the ACL with proper tension, while fluoroscopic stress testing showed less than 2mm of medial compartment gapping at 30° flexion, verifying successful restoration of stability in both reconstructed ligaments. Following combined ACL repair and MCL reconstruction, the patient was immobilized in a long-hinged knee brace locked in extension for 4 weeks. Strict non-weight-bearing ambulation was enforced using a walker to protect both the repaired ACL and the reconstructed MCL.

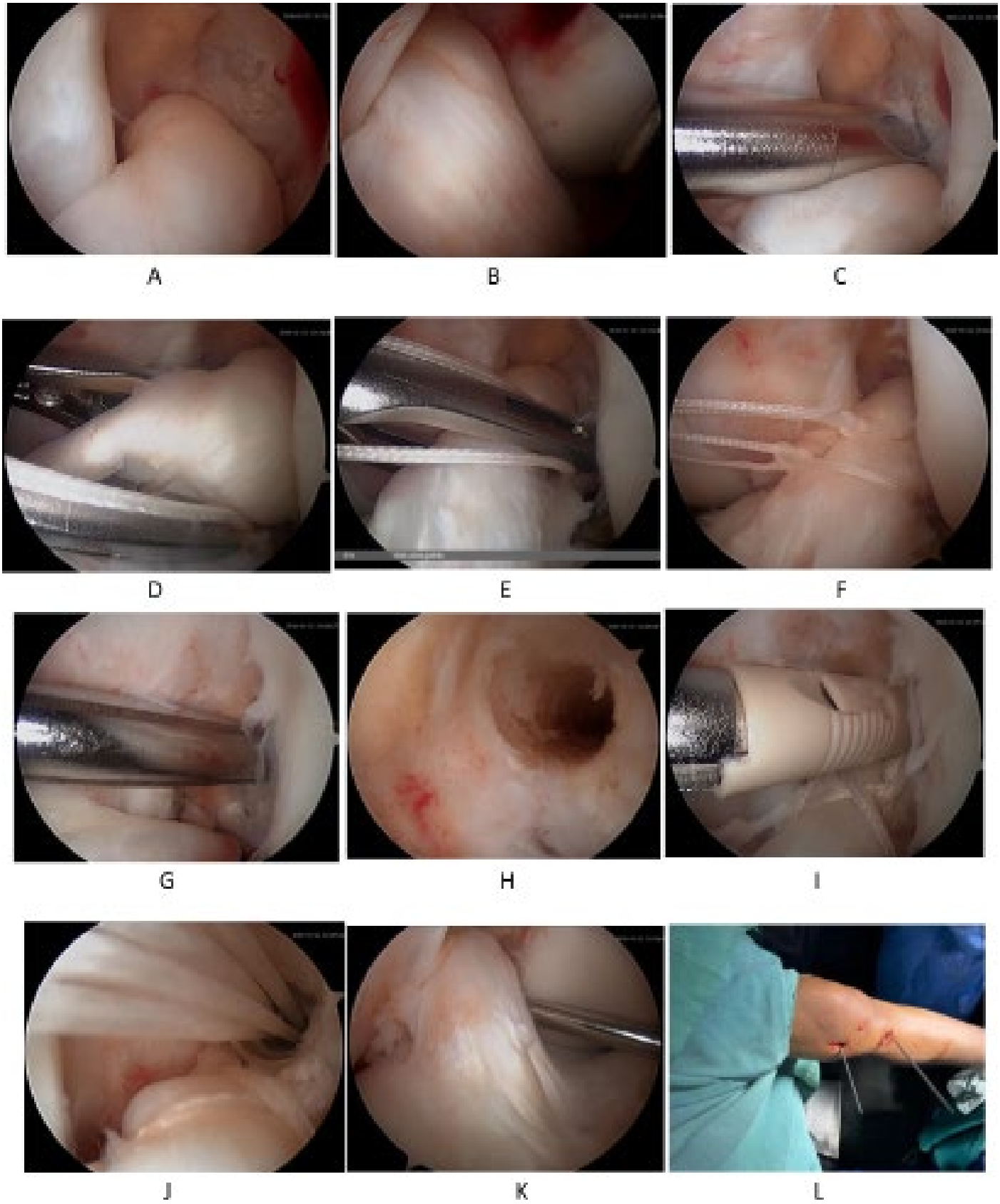

FIGURE 1. Surgical sequence of arthroscopic ACL repair and MCL reconstruction. (A,B) Femoral-sided ACL avulsion (Sherman Type I) with intact ligament substance and tibial attachment. (C) Femoral footprint preparation. (D-F) FiberWire suture passage through proximal ACL stump. (G,H) Creation of femoral tunnel for anchor insertion at anatomic footprint. (I,J) Placement of Pop Lock knotless anchor via anteromedial portal. (K) Final probing confirming restored ACL tension. (L) Intraoperative photograph showing guide pin placement for MCL reconstruction at isometric points (medial epicondyle and tibial insertion 15-20mm below joint line).

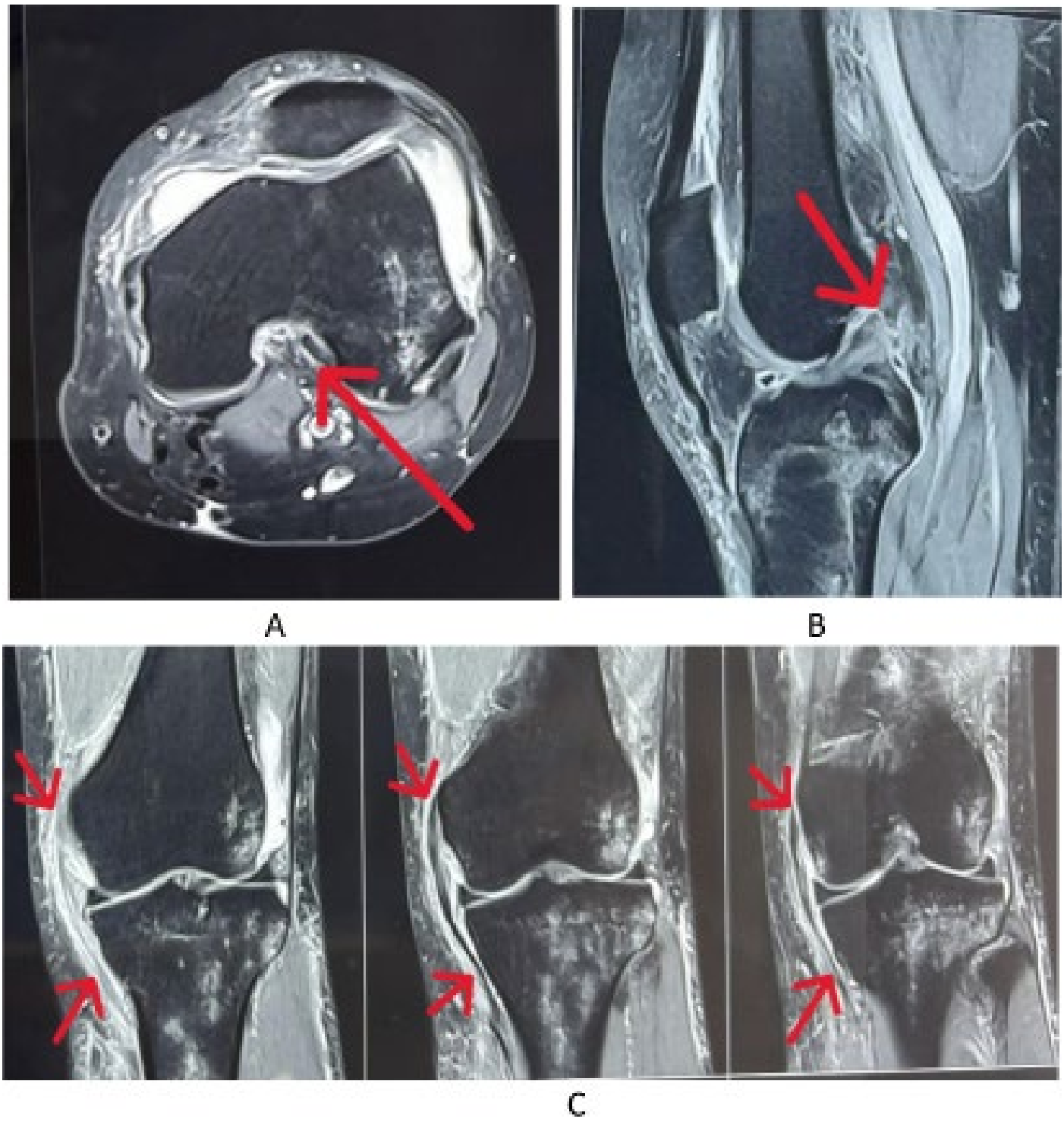

Figure 2. Preoperative MRI findings (STIR sequences). (A) Axial section demonstrating femoral-sided ACL avulsion (arrow). (B) Sagittal section showing avulsed ACL fibers (arrowhead) adjacent to trochlear region. (C) Serial coronal sections revealing: complete grade III MCL tear (arrow), peri ligamentous edema(arrow), and medial compartment gapping indicating laxity.

Discussion

Contemporary literature supports a reconsideration of ACL repair for carefully selected cases, particularly proximal avulsions with preserved tissue quality [1,3,4]. This represents a significant shift from historical approaches that reported poor outcomes, likely due to non-selective case inclusion and less refined techniques [1,4]. The current understanding of ligament healing suggests that properly reduced femoral avulsions can heal in a manner similar to MCL injuries when stabilized to a prepared bony footprint [5]. In the context of multiligament injuries, primary ACL repair offers several distinct advantages including preservation of native proprioception, avoidance of tunnel convergence with collateral ligament procedures, and maintenance of reconstruction options should revision become necessary [4,6]. While early intervention within two weeks appears ideal [3], emerging evidence indicates successful outcomes can still be achieved in appropriately selected delayed cases when combined with preoperative rehabilitation [4]. Critical technical factors contributing to success include robust suture fixation methods [3,6] and concurrent stabilization of associated injuries to protect the repair during healing. Current limitations of this approach include relatively strict selection criteria and a lack of long-term outcome data compared to traditional reconstruction [4]. Nevertheless, recent meta-analyses report success rates of 75-91% for properly indicated cases [3,4], suggesting that primary repair deserves a place in the modern algorithm for managing multiligament knee injuries. Future research directions should include comparative studies evaluating osteoarthritis progression and long-term functional outcomes between repair and reconstruction in this patient population [4,5].

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ACADEMIC CALENDAR

MAY-OCTOBER 2025

PROGRAM DETAILS

May-25	Knee - SRMS	Bareilly
Jun-25	Knee Prog. with Live Surgeries - Tamluk	
Jun-25	Knee - Dehradun	
Jun-25	Shoulder - Aurangabad	
Jul-25	Shoulder - Kurnool	
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Jul-25	Knee - Udaipur	
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Aug-25	Shoulder - Patna	
Aug-25	Knee - Tezpur	
Sep-25	Knee - Kurnool	
Sep-25	Shoulder - Huballi	
Sep-25	Knee - Ranchi	
Oct-25	Shoulder Prog. with Live Surgeries - Mangalore	
Oct-25	Knee - Bhubaneswar	
Oct-25	Knee - Srinagar	
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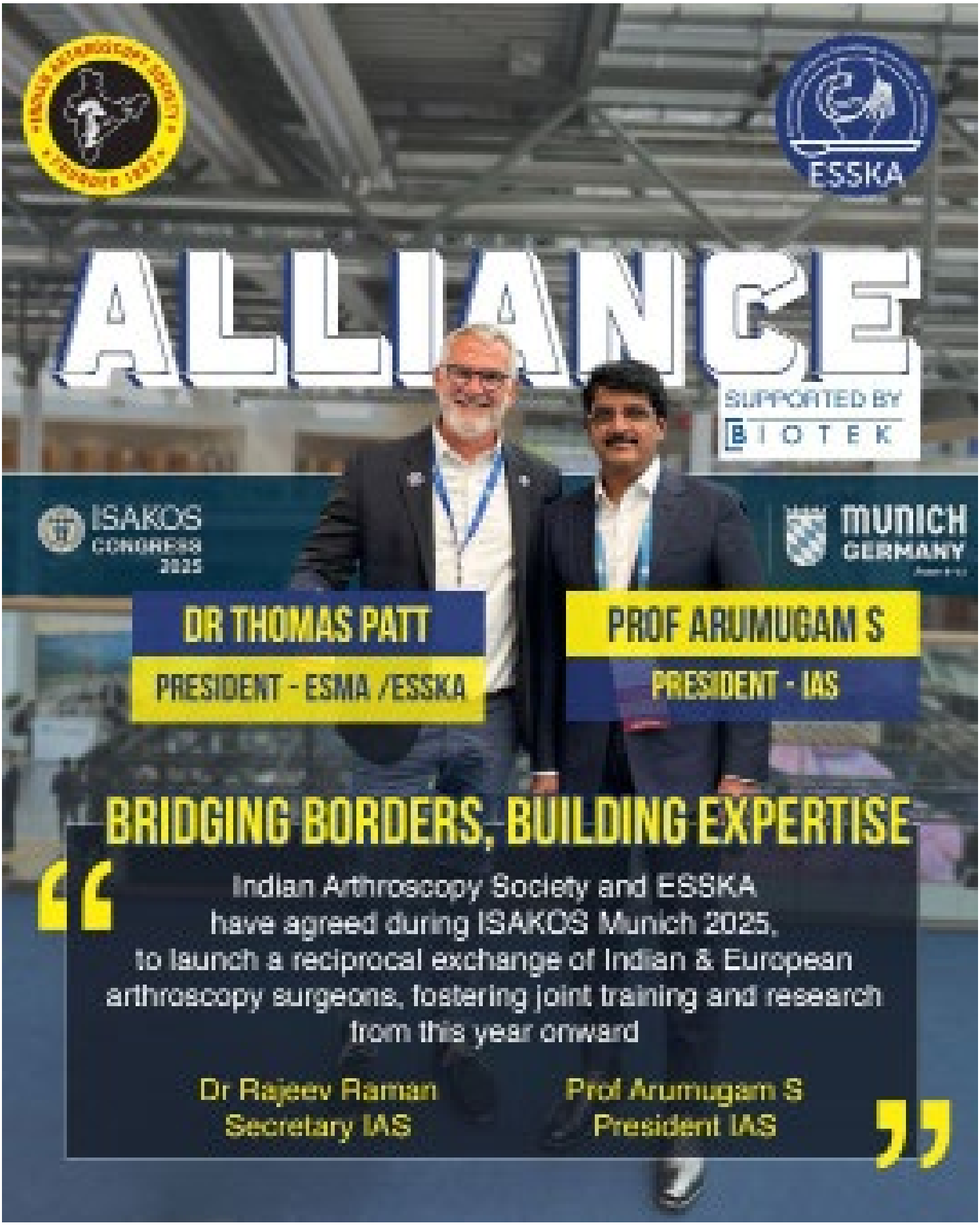
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