EUROPEAN ANTERIOR HIP MEETING

Standardising the Direct Anterior Approach

An Evidence-Based Intraoperative Decision Algorithm for Total Hip Arthroplasty

Authored by Mr. Mohammed Al-Amin, Mr. Murali Sayana, and Mr. Khalid Merghani
Beacon & Hermitage Hospitals, Dublin

Intraoperative Variability

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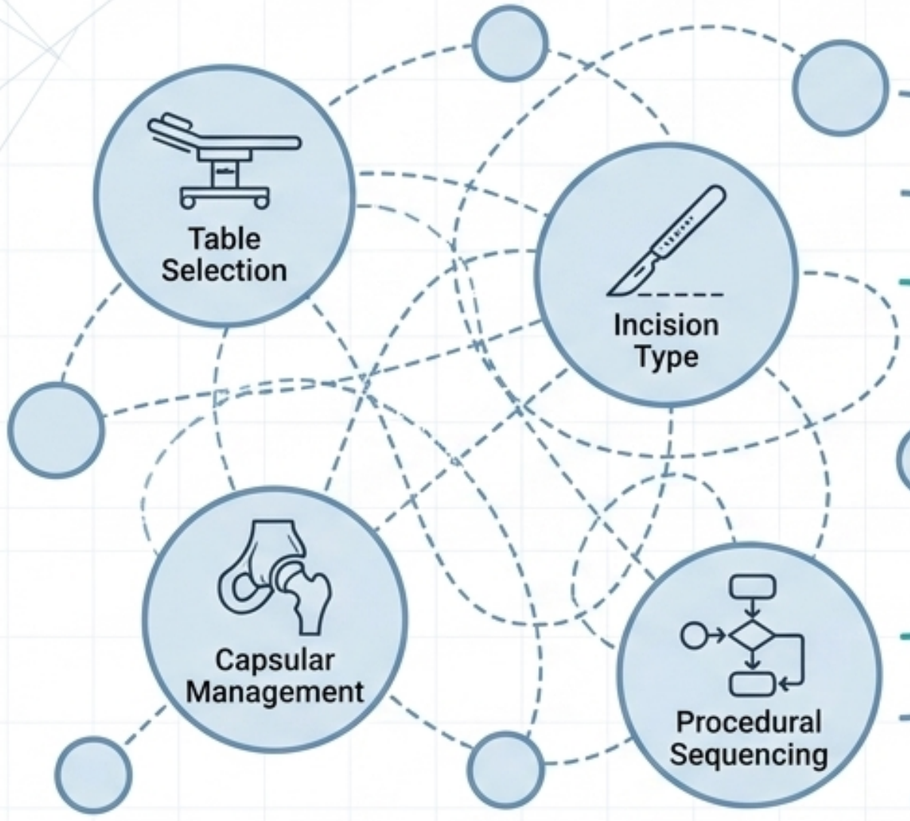

While DAA THA is increasingly adopted for muscle-sparing recovery, techniques vary highly among centers.

The Solution

The objective:
A concise, evidence-based algorithm built on contemporary literature to standardise decisions, facilitate training, and provide contingency planning.

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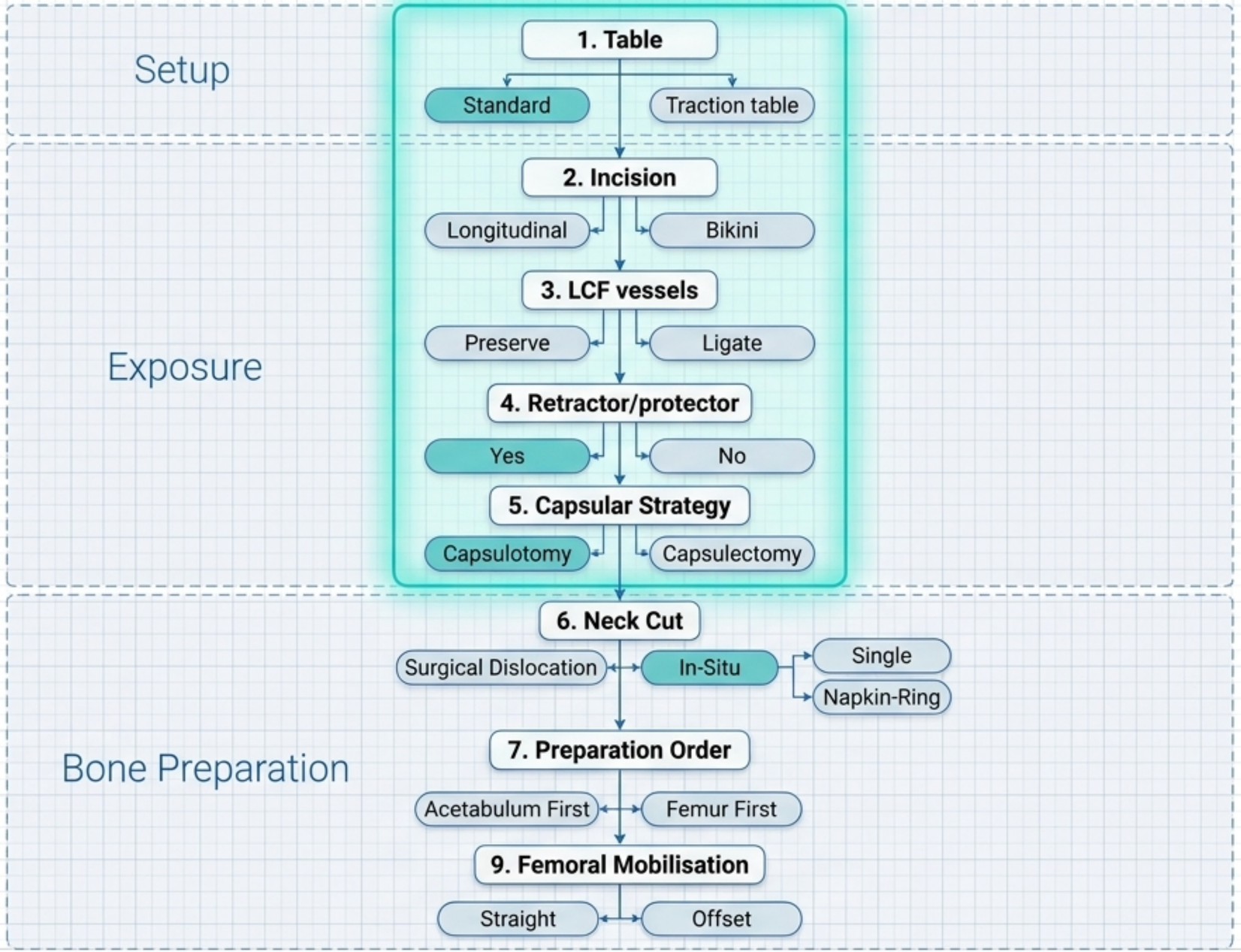

Node 1: Table Setup

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A/B Comparison Matrix	Standard Table	Traction Table
Blood Loss	↑	↓
Operative Time	↑	↓
Intraoperative Fractures	↑	↓
Periprosthetic Fracture Rate	↓	↑ (0.15 lower rate)
Complication Rates	→ (Similar: Based on 26,353 + 2,258 patients)	

Clinical Consensus: Choice should be determined by surgeon experience, workflow considerations, and equipment availability rather than expected differences in clinical outcomes.

Node 2: Incision Strategy

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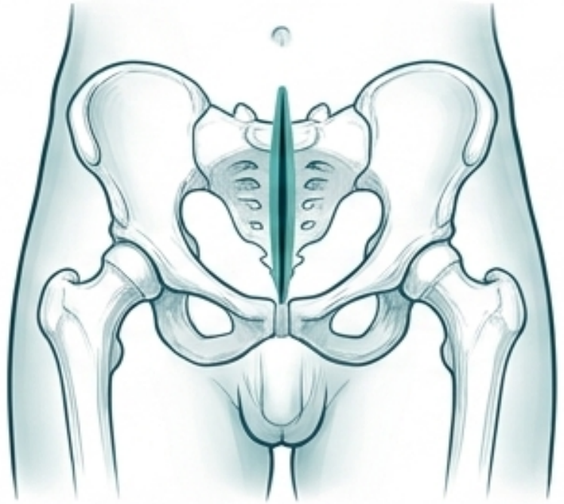
Longitudinal Incision



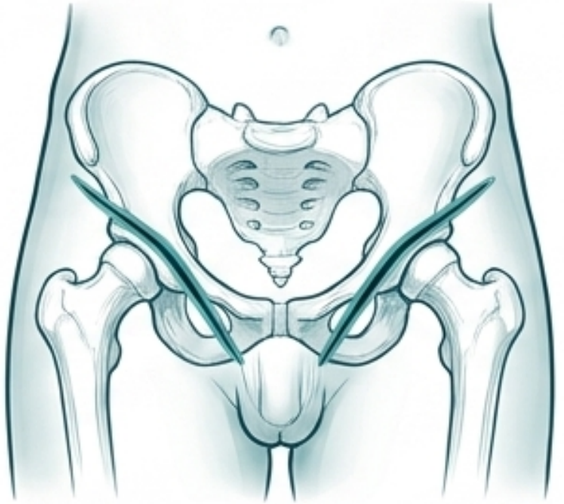
SPECIFICATION

Priority: Extensibility

Note: The preferred approach when operative exposure must be maximized.

The Tie: Functional Outcomes (HHS, OHS, activity scores) are firmly neutral between both approaches.

Bikini Incision



SPECIFICATION

Priority: Cosmesis

Pros: Improved scar appearance, higher patient satisfaction.
Risks: Higher incidence of LFCN injury, higher risk of wound complications.

Takeaway: Bikini is highly effective for selected patients under experienced surgeons, but Longitudinal remains the standard when operative exposure must be maximized.

Node 3: LFCA Management

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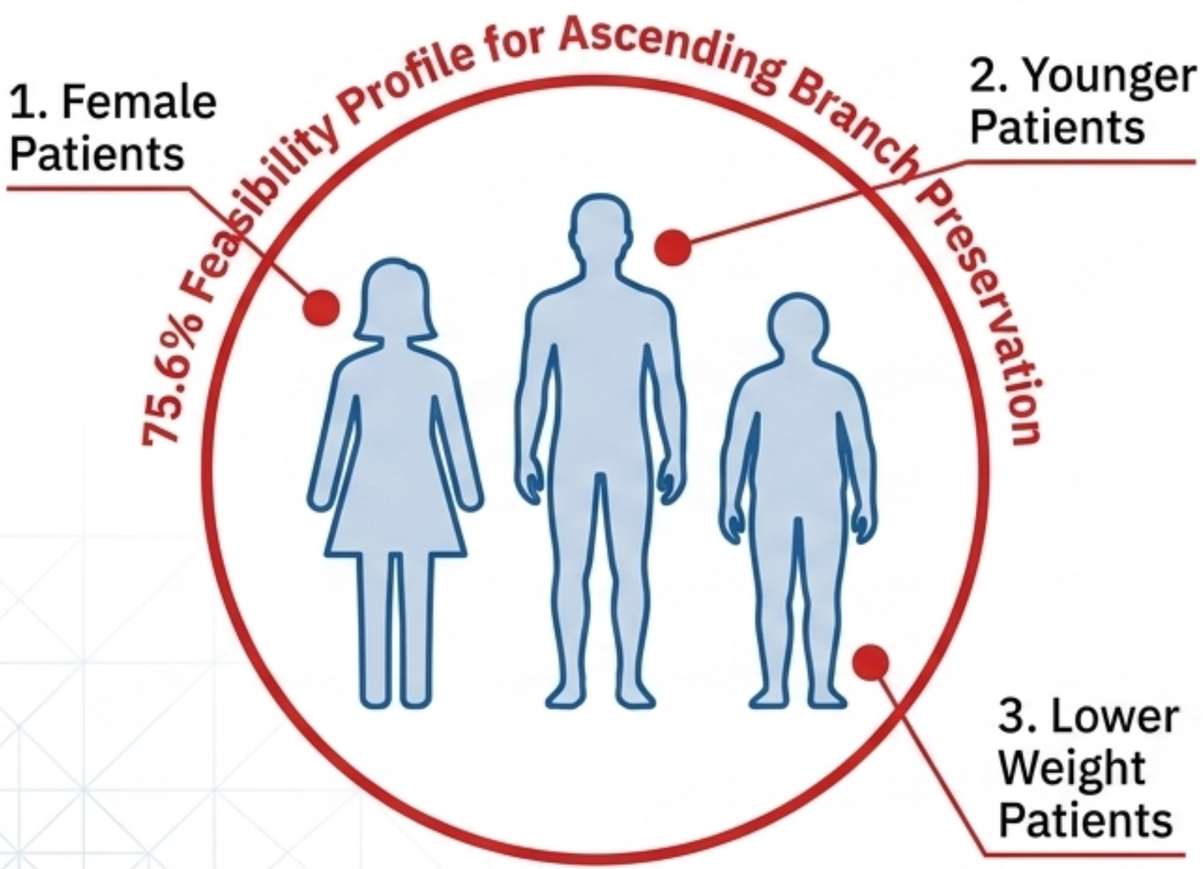
Patient Profile



Clinical Impact

Preservation → Leads to reduced early swelling (6 weeks) and decreased TFL pain (2 years).

Ligation → Results in significantly smaller mean TFL volume (11.6% side-difference).

Neutral impact: Functional outcomes, PROMs, muscle strength, and revision rates remain equal regardless of approach.

Node 4: Ring Wound Retractors

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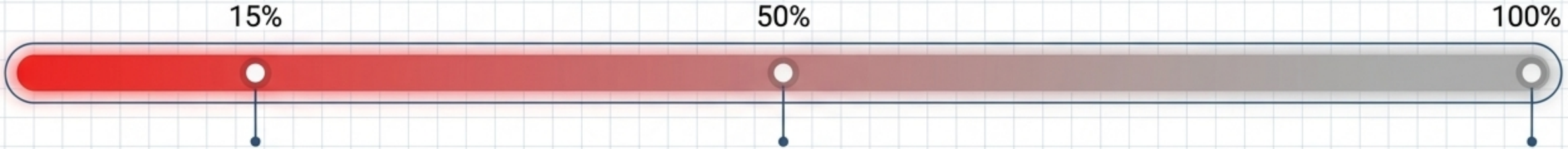
Efficacy Timeline



2 Weeks
Slight improvement in Modified Scar Scale (MSS).

6 Weeks
Cosmetic benefit fades.

12 Weeks
No measurable improvement in scar appearance or patient satisfaction.

Key Insight Panel

RCT data (50 primary DAA THAs) indicates routine use of ring wound retractors for cosmetic benefit is unsupported. Meticulous soft-tissue handling and careful wound closure remain the critical factors.

Horizon Note: Prospective clinical trial underway at University of Miami (results expected 2028).

Node 5: Capsular Strategy

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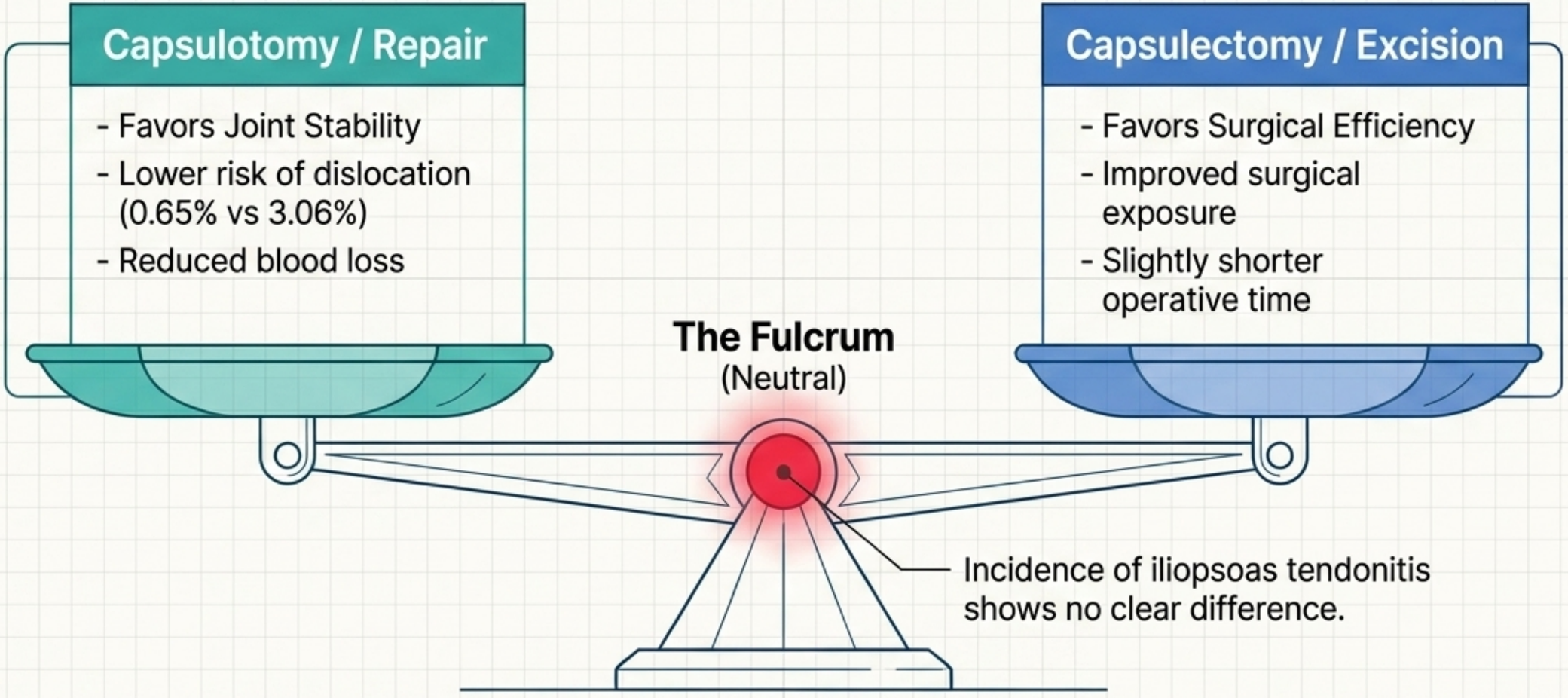
Capsulotomy / Repair

- Favors Joint Stability
- Lower risk of dislocation (0.65% vs 3.06%)
- Reduced blood loss

Capsulectomy / Excision

- Favors Surgical Efficiency
- Improved surgical exposure
- Slightly shorter operative time



Note: Data primarily from retrospective observational studies; lacks prospective randomized trials.

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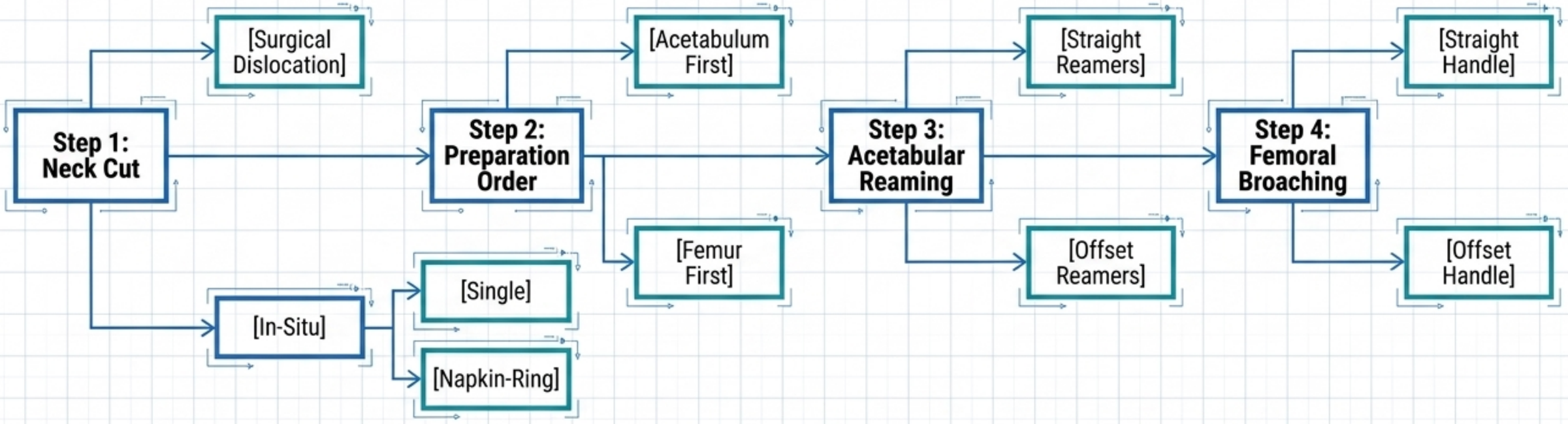
Nodes 6–9: Bone Preparation Framework



Final bone preparation nodes emphasize flexible equipment adaptation while maintaining a standardized procedural sequence.

Conclusion: The Value of Standardisation

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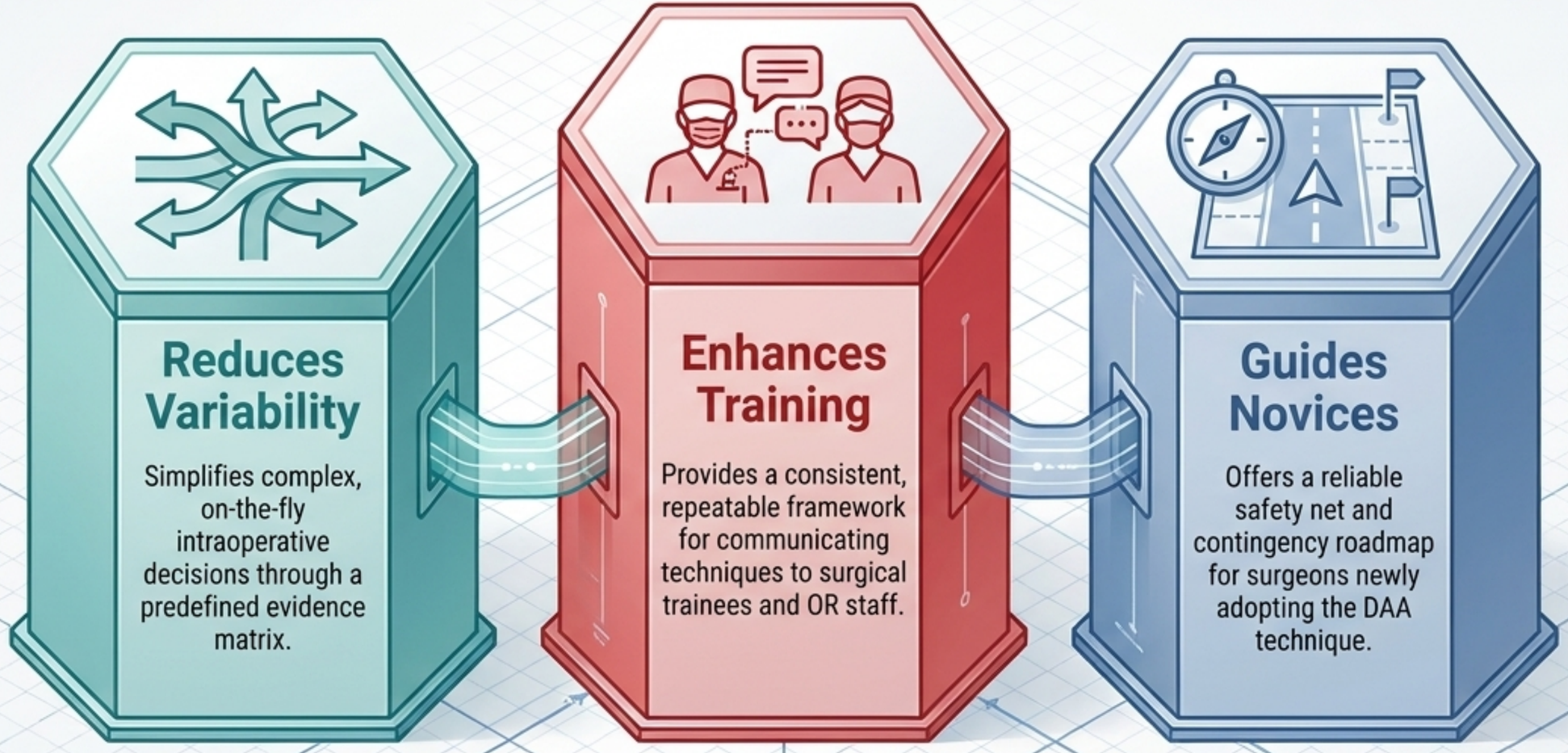

Next Steps: Prospective multicentre validation is required to assess efficiency, complication rates, and implant positioning.

Presenter Contact

Mr. Murali Sayana
Hermitage Hospital,
Dublin, Ireland

Scan for Full Research and Reference Links

Key Literature Base

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- **Sarraj (2020) -** Table Setup
- **Ramadanov (2024) -** Direct Comparisons
- **Butler (2022) -** Incision Protocols
- **Bell (2025) -** LFCA Preservation
- **Matar (2024) -** Ascending Branch Feasibility
- **Miranda (2021) -** Capsular Management