2026 SSHS

Hand Review Course & Annual Scientific Meeting

Shaping Tomorrow, Guided by Legacy

29 - 30 January 2026 | 7.30am

VOCO Orchard
581 Orchard Rd, Singapore 238883

SOCIETY FOR HAND SURGERY • SINGAPORE •

Welcome Address

Dear Friends and Colleagues,

A very Happy New Year to all of you!

The past year has been an exciting one for the Singapore Society for Hand Surgery. We were delighted to host the regional **Combined Hand Surgery Summit (CHSS)** in February 2025, where friends and colleagues from Malaysia, Indonesia, Thailand, and the wider region joined us for a vibrant scientific meeting. At the same time, preparations are well underway for the **IFSSH Congress**, which we are proud to host in Singapore in 2028.

Closer to home, it gives me great pleasure, on behalf of the Singapore Society for Hand Surgery (SSHS), to welcome you to the **2026 SSHS Hand Review Course and Annual Scientific Meeting**, themed **"Shaping Tomorrow, Guided by Legacy."** This year's meeting has been thoughtfully put together by our trusted colleagues **Dr Bernice Heng** and **Dr Abby Choke**, with something for everyone. For our juniors and those looking for a refresher, we have a comprehensive foundational review course that incorporates the latest best practices. We will also have a 'Learning from the Expert' segment, where our senior hand surgeons will share their surgical pearls, lessons learned, and some of their most challenging cases. We are also excited to hold a full day Nursing Symposium, led by **ANC Chan Sze Huey,** offering a wonderful opportunity for interhospital multidisciplinary learning,

As we reflect on the legacy of those who have shaped our specialty, I hope this meeting will be a meaningful and enjoyable one—sparking lively discussions, strengthening friendships, and inspiring us as we continue to shape the future of hand surgery together.

On behalf of the Exco, I would like to thank the organizing team and all of you for your continued support. Most importantly, I hope everyone will have a great time at the meeting.

Wishing you a fantastic year ahead.

Warm regards,

Dr Robert Yap
President (2025-2027)
Singapore Society for Hand Surgery

SSHS EXCO

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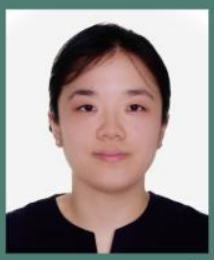

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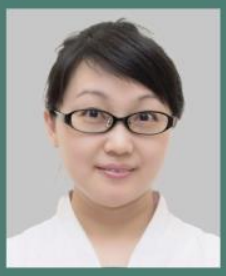

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Emcee

Dr Tay Poi Hoon
Dinner Lead

Mr Joshua Wong
Secretariat

Hand Review Course
29 Jan, Thursday
Day 1

7.30 – 8.30am	**Breakfast Session**
	For the Residents: Viva Masterclass and Paper Critique Panels: Dr Lam Wee Leon, Dr Renita Sirisena, Dr Lim Zhixue
8.40 – 8.50am	**Opening Address** Dr Robert Yap & Dr Bernice Heng
09.00 – 10.00am	**Session 1: Trauma and Microsurgery** Moderators: Dr Peng Yeong Pin, Dr Sandeep Sebastin
	Acute Tendon Injuries Dr Tong Pei Yein
	Complex Hand Fractures Dr Kang Yong Chiang
	Assessment of Fingertip and Hand Defects Dr Bernice Heng
	Mangling Limb Injuries Dr Soumen Das De
	Q&A
10.10 – 10.30am	**Morning Tea Break**
10.30 -11.30am	**Session 2: Wrist** Moderators: Dr Andrew Chin, Dr Yeo Chong Jin
	Distal Radius Fractures Dr Janice Liao
	Wrist fracture-dislocations Dr Justine Lee
	Carpal Instability Dr Camelia Tang
	Triangular Fibrocartilage Complex (TFCC) Dr Muntasir Choudhary
	Q&A

Hand Review Course
29 Jan, Thursday
Day 1

11.40am - 12.40pm	**Session 3: Arthritis** Moderators: Dr Kevin Wong, Dr Jackson Jiang Small Joint Arthritis Dr Renita Sirisena Thumb CMCJ instability and arthritis Dr Lai Jen Ming Inflammatory Arthritis Dr Mala Satku Scaphoid Fractures and SNAC Dr Chung Sze Ryn **Q&A**
1.00 – 2.00pm	**Lunch Symposium** **Sponsor: PolyNovo** Functional and Aesthetic Outcomes in Hand injuries using BTM Dr Usama Farghaly Omar (KTPH) Dr Vaikunthan (KTPH) Concurrent: **Video Presentation Judging** **Ballroom 2** Dr Chung Sze Ryn, Dr Lim Jin Xi
2.10 - 3.10pm	**Session 4: Nerve** Moderators: Dr Andrew Yam, Dr Dawn Chia Nerve Injuries and Repair Dr Joyce Tie Compressive Neuropathies Dr Tan Ter Chyan

Hand Review Course
29 Jan, Thursday
Day 1

	Adult Brachial Plexus Injury Dr Ellen Lee Assessment and Management of Upper Limb Spasticity Dr Ruth Tan **Q&A**
3.20 – 3.40pm	**Afternoon Tea Break**
3.40 – 4.40pm	**Session 5: Congenital Difference, Infection, and Tumour** Moderators: Dr Alphonsus Chong, Dr Sia Wei Tee Common conditions in Congenital Hand Differences Dr Chang Min Kai Infections of the Hand Dr Wang Qiao Benign Tumours Dr Xu Jie Ying Malignant Tumours Dr Chan Chung Ming **Q&A**
5.00pm **6.30 – 9.30pm**	**End of Day 1** **Conference Dinner** Shashlik Restaurant (Registration required)

Annual Scientific Meeting
30 Jan, Friday
Day 2

7.30- 8.30am	**Breakfast Session** **Sponsor: Eplus Healthcare Pte. Ltd.** The Role of Prochondrix in Cartilage Replacement and Arthroplasty Dr Lim Beng Hai (CHARMS)
8.45– 10.00am	**Session 1: How I Do It? (Practical Tips and Tricks)** Minimally Invasive Hand Fracture Fixation Dr Oliver Yiu Syndactyly Release Dr Darryl Chew Tendon and Nerve Transfers Mr Yong Fok Chuan Setting up for a Successful Scope Surgery Dr Chung Sze Ryn **Q&A**
10.00 – 10.20am **10.20 – 11.35am**	**Morning Tea Break** **Session 2: What's New on the Horizon?** Stem Cells and Wound Healing Dr Ivor Lim, Consultant Plastic Surgeon Artificial Intelligence in Hand Surgery Dr Vaikunthan Rajaratnam MR Neurography Dr Poh Feng, Consultant MSK Radiologist 3D Printing in Hand Surgery Dr Rebecca Lim **Q&A**

Annual Scientific Meeting
30 Jan, Friday
Day 2

11.45 – 1.00pm (concurrent)	**Oral Presentation (Podium)** Main Ballroom 1 Judges: Prof Agnes Tan, Dr Sreedharan Sechachalam, Dr Tan Puay Ling
11.45 – 1.15 pm (concurrent)	**Short Oral Presentation (Podium)** Vista 2 Ballroom Judges: Dr Lam Wee Leon, Dr Soumen Das De Batch 1: 11.45am – 12.20pm Batch 2: 12.30pm – 1.15pm
1.00 – 2.00pm	**Lunch Symposium** **Main Ballroom** **Sponsor: Essity + Dyamed** Casting in Paediatric Orthopaedics Surgery: Our KKH Journey Adj A/Prof Dr Kenneth Wong Pak Leung (KKH)
2.10 – 3.25 pm	**Session 3: My Most Challenging Case…Ever** 1. Prof Teoh Lam Chuan 2. Dr Jacqueline Tan 3. Dr Winston Chew 4. Dr Sandeep Sebastin **Q&A**
3.25 – 3.40pm	**Afternoon Tea Break**

Annual Scientific Meeting
30 Jan, Friday
Day 2

3.40 – 4.40pm	**Session 4: Beyond the Scalpel** How to Get Your Research Published: From Methods to Manuscript Dr Lam Wee Leon Chronic Pain: An Anaesthetist's Perspective Dr Terence Quek, TTSH Anaesthesia Consultant Complications and How I Deal With Them Dr Sreedharan Sechachalam SSHS Traveling Fellowship 2025 Sharing Dr Wendy Teo **Q&A**
4.45 – 5.00pm	**Prize Presentation**
5.00pm	**Closing Ceremony**

Hand Nursing Symposium
30 Jan, Friday
Vista 1 Ballroom

7.30 – 8.30 am	**Registration and Breakfast**
8.30 – 8.40 am	**Opening Address** ANC Chan Sze Huey (TTSH)
8.40 – 9.10am	**Session 1: Adult Hand Trauma** Dr Abby Choke (SGH)
9.10 – 10.10am	**Session 2: Precision, Partnership, and and Perioperative Safety in Adult Hand Microsurgery** - Flap Surgery in Safe Hands: The Operating Room Nurse Role NC Sangeetha D/O Krishnan and SSN Edwin Swee (SGH) - Microsurgery Nursing Excellence: The Art of Assisting in Fine Detail ANC Nurulhuda Binte Khalid & SSN Melissa Chua (TTSH)
10.10 – 10.25am	Q&A
10.25 – 10.45am	**Morning Tea Break**
10.45 – 11.15am	**Session 3: Paediatric Hand Trauma** Dr Dawn Chia (SKH, KKH)
11.15 – 12.15pm	**Session 4: Tiny Hands, Big Precision — Tailoring Perioperative Care for Paediatric Microsurgery** ANC Hazaliza Ibrahim (KKH) ANC Zar Chi Win (NUH)
12.15 - 1.00pm	**Q&A and Sharing Session**

Hand Nursing Symposium
30 Jan, Friday
Vista 1 Ballroom

1.00 – 2.00pm	**Lunch Symposium**
Main Ballroom	**Sponsor: Essity + Dyamed** Casting in Paediatric Orthopaedics Surgery: Our KKH Journey A/Prof Dr Kenneth Wong Pak Leung (KKH)
2.00 – 2.30pm	**Session 5: Management in inpatient ACA for microsurgical case** - Major and digital replantation - Flap monitoring ANC Ailen Glodoviza Carlos (TTSH)
2.30 – 2.50pm	**Session 6: Tiny Hands, Gentle Touch: Practical Techniques in Paediatric Hand Wound Dressing** SSN Siti Hanisah Bte Mohammed Haniff (NUH)
2.50 – 3.10pm	**Session 7: Nurse empowerment- Nurse led steroid injection for trigger finger** SNM Rahimah Bte Bahri (NUH)
3.10 – 3.20pm	**Q&A**
3.20 – 3.30pm	**Afternoon Tea Break**
3.30 – 3.50pm	**Session 8: PROMISE (Programme for Osteoporosis Management Insufficiency Fractures and Sarcopenia in the Elderly)** SSN June Loh (WHC)
3.50 – 4.10pm	**Session 9: Aiyo!!! Break already. How ah???** NC Fadzleen Binte Johari (TTSH)
4.10 – 4.40 pm	**Q&A and Sharing Session**
4.40 – 5.00pm	**Closing Ceremony**

SHORT VIDEO COMPETITION

29 JAN 2026, Thursday

Ballroom 2
1.00 – 1.40 pm

Judges: Dr Chung Sze Ryn, Dr Lim Jin Xi

Ward Nursing Management of Continuous Catheter Irrigation in Hand Infections APN Wen Jing
Use of indocyanine green fluorescence imaging in index assessment of lower limb trauma - Defining a new standard of care Shubashri Jeyaratnam, Bernice Heng, Mala Satku
How to perform 6 core repair in Lim and Tsai technique under 5 minutes alone in ED Low Zhi Xuan
Nailbed Repair Basic for the New On Call MO Elaine Quah, Low Zhi Xuan
Minimally Invasive Endoscopic Palmaris Longus Abductoplasty For Severe Carpal Tunnel Syndrome Thenar Muscle Paralysis Reconstruction Dawn Chia, Suraj Sajeev
Scaphoidectomy and Four-Corner Fusion – Tips and Tricks Chow Bi Yang, Bernice Heng, Prof Teoh Lam Chuan

ORAL PRESENTATION

30 JAN 2026, Friday

Grand Ballroom 1

11.45am to 1.00pm

Judges: Prof Agnes Tan, Dr Sreedharan Sechachalam, Dr Tan Puay Ling

(5 mins presentation + 1 min discussion)

Atypical Injury Patterns in Workplace Hand Injuries: Insights from a Single Tertiary Centre Chan Long Peng, Camelia Tang Qian Ying, Darryl Chew Ee Ming
Age Related Bone Remodelling of Paediatric Phalangeal Neck Fractures Ashley Chua, Chang Min Kai, Nicole Lee, Darryl Chew Ee Ming
Frayed Suture Ends, a Blessing in Disguise? Biomechanical Investigation of Frayed Suture Ends Lin Yunni Snow, Duncan Angus McGrouther, Wong Yoke Rung
Arthroscopic Ligament-Specific Foveal Repair of the TFCC Using PushLock Anchors: Surgical Technique and Early Results Chan Long Peng , Chung Sze Ryn
Percutaneous Plate Fixation of Distal Radius Fractures: A Soft Tissue-Sparing Technique Muthuraja Shanmugaraja, Chow Bi Yang, Oliver Yiu Hon Wah
Fragility fracture cascade: meta-analysis on risk of subsequent hip fracture following an index wrist fracture Hoh Wan Ling Dilys, Mala Satku
Assessing Scaffold-guided Bone Regeneration using a 3D printed polycaprolactone-tricalcium phosphate (PCL-TCP) composite scaffold in a Rodent Model Heng Shu Yun, Duncan McGrouther, Andrew Chin, Abby Choke
Considerations in Heterotopic Replantations for Mangled Digits Sarah Huan Khian Wan, Tomasz Jakub Merta, Sandeep Jacob Sebastin
Bone Remodelling Potential of Paediatric Hand and Wrist Fractures: A Scoping Review Snow Lin, Soumen Das De, Liu Chun Xi, Sharanya
Tegaderm versus Hyphecan for Fingertip Injury Management: A Prospective Randomized Controlled Trial Wong Calvin Tin Long, Leung Odin Tymon, Chan Yuen Man, Chow Esther Ching San

SHORT ORAL PRESENTATION

30 JAN 2026, Friday

Vista 2 Ballroom

11.45am to 1.15pm

Judges: Dr Lam Wee Leon, Dr Soumen Das De

(3 mins presentation + 1 min discussion)

Batch 1 (start 11.45am)
A Holistic Approach to Measuring the First Web Space in Children with Congenital Thumb Deformities Isabelle Lim Jia Xuan, Dawn Chia
Surgical Techniques for Wassel Type IV Pre-Axial Polydactyly of The Hand: A Case Series and Literature Review Tito Sumarwoto, Hendra Cahya Kumara, and Ricat Hinaywan Malik
Combined wrist fusion and Sauve-Kapandji procedures in severe wrist deformity – a case report Jude Cornelius Savarirajo, Vinod Nagaretnam, Kartigesu Murugan, Chua Wei Siong
Scoping Review of Factors Which Affect Clinical Outcomes of Open Distal Radius Fractures Junie Ng Yu Ning, Krystal Valerie Soh, Mala Satku
Scaphoid Fractures – Bridging the (Bone) Void with Conservative Management Foo Jen Yinn, Julian Matthew Rocero, Tham Sherlyn Yen Yu, Mala Satku
Midcarpal arthritis and its association with seronegative arthritis Hoh Wan Ling Dilys, Mala Satku
A Practical Adjunct for Root Grafting in Brachial Plexus Injury: Early Experience with a Nerve Detector Dina Aprila, Oryza Satria
BREAK (5mins)

SHORT ORAL PRESENTATION

30 JAN 2026, Friday

Vista 2 Ballroom

11.45am to 1.15pm

Judges: Dr Lam Wee Leon, Dr Soumen Das De

(3 mins presentation + 1 min discussion)

Batch 2 (start 12.30pm)
Stem Cell and Secretome Augmentation in TFCC Repair: Preliminary Clinical Evidence Oryza Satria, Dina Aprila
A Comparative Assessment of Surgical Techniques for Carpal Tunnel Release: a Systematic Review Komang Pramana Anandhika Karna, Made Bramantya Karna
Accuracy of Ultrasonography Diagnostic Tests in Carpal Tunnel Syndrome (Electromyography-Nerve Conduction Velocity as Gold Standard) Bramantya Karn, Benedictus Deriano
Flexor Tendon Rupture After One Corticosteroid Injection in the Treatment of Trigger Finger: A Case Report and Literature Review Noah Sim, Darryl Chew
Flexor Tendon Stretching in the Treatment of Trigger Finger Nicole Yap, Oliver Yiu
Incidence of hip fractures after distal radius fractures Heng Shu Yun, Koh En Han, Mala Satkunanantham

Congress Dinner 29th Jan 2026

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1- Day Upper Limb Anatomy Dissection Course

ORGANIZED BY:

DATE: 31 JANUARY 2026 SATURDAY

TIME: 8.00AM – 5.00PM

VENUE: ACADEMIA BASEMENT LAB, SGH

COURSE DIRECTOR: DR LAM WEE LEON

This 1-day cadaveric demonstration course focuses on Anatomy as the basis for learning about pathologies, surgical approaches and biomechanical principles.

The course will be led by an experienced team of upper limb surgeons, including hand surgeons from all three major institutions. Detailed anatomy of each region will be demonstrated with clinical relevance, such as nerve compression sites and approaches to brachial plexus , major joints, shoulder, elbow and wrist joints. Live demonstrations of procedures will be tailored to the participants' needs and will include nerve and tendon transfers, flaps and spasticity management.

The course is suitable for those from hand, plastic and orthopaedic surgery, anaesthetics, radiology and rehabilitation medicine. All grades are welcome.

Please note that this is a demonstration-only course; participant dissection facilities will not be provided. Limited seats available.

1- Day Upper Limb Anatomy Dissection Course

REGISTRATION STARTS AT 7.50AM

Please register via QR code link above, limited space available.

8:00AM – 5:00PM
Programme Outline:

Dissection – 1st Session: Neck

- Brachial plexus / Infraclavicular space / Axilla / Chest wall muscles and innervation / Different spaces (quadrangular/triangular)

Dissection – 2nd Session: Upper arm

- Flexor and extensor compartments of the arm / Spiral groove / Cubital fossa / Cubital tunnel and ulnar nerve / Radial nerve at level of elbow

Dissection – 3rd Session: Forearm

- Superficial flexors / Deep flexors / Course of radial, ulnar and median neurovascular bundles/ Anterior interosseous bundle
- Course of radial nerve and PIN / Extensors / Dorsal compartments

Dissection – 4th session: Hand

- Palmar aponeurosis / Carpal tunnel / Guyon's canal, ulnar nerve and artery / Anatomical snuffbox / Deep neurovascular pattern in palm / Lumbricals and interossei
- Dorsum of hand, extensor hoods and intrinsics
- Mechanism of Boutonnière, Mallet and Swan Neck deformities
- Flexor tendons and sheaths / Ligaments
- Wrist, volar plates, collaterals of IP joints

Orthopaedic Dissection:

- Anatomy and approaches to the shoulder, elbow and wrist joints

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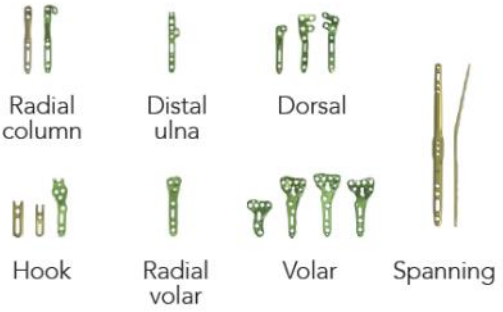

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References: 1. Wagstaff MJD, Schmitt BJ, Coghlan P, Finkemeyer JP, Caplash Y, Greenwood JE. A biodegradable polyurethane dermal matrix in reconstruction of free flap donor sites: a pilot study. ePlasty 2015; 15:102–18. **2.** Greenwood JE, Schmitt BJ, Wagstaff MJD. Experience with a synthetic bilayer Biodegradable Temporising Matrix in significant burn injury. Burns Open. 2018;2(1):17–34. **3.** Wagstaff MJD, Salna IM, Caplash Y, Greenwood JE. Biodegradable Temporising Matrix (BTM) for the reconstruction of defects following serial debridement for necrotising fasciitis: A case series. Burns Open. 2019; 3:12–30.

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2026 Hand Review Course and Annual Scientific Meeting

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ABSTRACTS

ORAL PRESENTATION

Atypical Injury Patterns Workplace Hand Injuries: Insights from a Single Tertiary Centre

Chan Long Peng, Camelia Tang Qian Ying, Darryl Chew Ee Ming
Singapore General Hospital, Singapore

Introduction: Self-inflicted hand fractures presented as workplace injuries may represent a novel form of social fraud aimed at exploiting workers' compensation systems. Heightened awareness of such cases can assist clinicians, insurers, and legal authorities in identifying potential fraudulent claims. This study describes a series of hand injuries with unusual but recurring patterns that may suggest deliberate self-harm with intent to defraud, where injury patterns do not coincide with incidence that is reported in literature.

Methods: A retrospective review was conducted of patients presenting with hand fractures over a five-year period (2018, 2019, 2023, 2024, 2025) at a single tertiary care centre. Cases deemed suspicious were identified based on a constellation of clinical and contextual factors, including injury pattern, hand dominance, consistency of reported mechanism of injury, associated injuries apart from hand fracture.

Results: A subset of patients with consistent characteristics were identified: transverse fractures of the non-dominant hand, minimal soft tissue injury, and vague or inconsistent injury mechanisms. Often, these fractures occur in occupational settings under unclear circumstances. The incidence of these injuries appeared elevated compared to what is typically reported in the literature, raising concerns about intentional self-infliction. Further, we review current literature to attempt to define a possible mechanism of these types of injuries.

Conclusion: Although these observations are anecdotal and not definitive, the consistency of findings warrants further investigation. We hope to raise awareness among healthcare providers, insurers, and regulatory bodies. Increased vigilance and inter-agency collaboration may help close this potential loophole in current workers' compensation frameworks.

Age Related Bone Remodelling of Paediatric Phalangeal Neck Fractures

Ashley Chua, Chang Min Kai, Nicole Lee, Darryl Chew Ee Ming
Singapore General Hospital, KK Women and Children Hospital

Introduction: In this study, we asked (1) do displaced phalangeal neck fractures remodel significantly with time with conservative management? (2) does patient age predict the degree of radiographic correction (3) how long does it take for significant remodelling to occur? (4) do remodelled fractures correlate with range-of-motion outcomes?

Methods: This retrospective study reviewed patients aged 16 years and younger with displaced phalangeal neck fractures treated at a tertiary hospital from January 2017 to December 2023. Institutional Review Board approval was obtained prior to study commencement. Subjects were identified from hospital electronic medical records using finger fracture diagnosis codes. All patients with displaced phalangeal neck fractures involving any digit were included. Exclusions comprised of patients who received surgical intervention, undisplaced fractures, open injuries and insufficient data.

Results: There was significant remodelling in the coronal and sagittal angulations and translations after conservative treatment in our paediatric population. Age showed a significant positive correlation with changes in sagittal angulation and translation. By dichotomising the population, significant differences in both sagittal angulation and translation were present only up to the ≤ 8-year threshold. Significant differences in the sagittal angulation were observed up to the ≤ 1.5 months of follow-up. In our population, the mean total active motion was 258.4 ± 24.4°, with all but 2 digits achieving "Excellent" outcome.

Conclusion: Displaced paediatric phalangeal neck fractures demonstrate substantial remodelling both coronal and sagittal planes, with younger children showing greater sagittal plane correction. An age of ≤ 8

years emerged as a practical threshold for enhanced remodelling potential. A period of 1.5 months appeared to be the minimum time required for sagittal angulation remodelling. Overall, conservative management resulted in good total active motion.

Frayed Suture Ends, a Blessing in Disguise? Biomechanical Investigation of Frayed Suture Ends

Lin Yunni Snow, Duncan Angus McGrouther, Wong Yoke Rung
Singapore General Hospital, Singapore

Introduction: Multifilament sutures have a unique tendency to fray due to its multifilament structure. This tendency to fray is often perceived negatively, due to its unpleasant appearance and increased risk of irritation to the surrounding tissues. However, these frayed ends could also potentially increase the frictional force and eventually prevent knot slippage. This study aims to develop a biomechanical testing method and investigate the effect of frayed suture ends on the slippage force of multifilament knots.

Methods : Ultra-High Molecular weight polyethylene (UHM) suture was used to make 20 square knots with 2 throws. To complete the knots, 10 knots were cut by using nursing scissors, which contains a blunt blade to create frayed suture ends. Others were cut by using suture scissors made up of 2 sharp blades to create neat suture ends. A biomechanical tester was used to pull the knot at a constant speed, while the dead weights were gradually added until knot failure. A 2 tailed student T test was carried out to test for significant differences between the groups.

Results: The slippage force of sutures with frayed ends and neat ends was 6.84 ± 1.44N and 3.80 ± 1.23N separately. Knots with frayed ends were found to have a significant higher slippage force as compared to those with neat ends (6.84N vs. 3.80N, $p < 0.001$). Microscopic observations also revealed how the frayed ends held the suture ends together before the occurrence of knot slippage.

Conclusion: Therefore, what was once perceived as an unpleasant end of a suture, could potentially play a critical role in reducing knot slippage and impact the way we develop sutures in the future.

Arthroscopic Ligament-Specific Foveal Repair of the TFCC Using PushLock Anchors: Surgical Technique and Early Results

Chan Long Peng , Chung Sze Ryn
Singapore General Hospital, Singapore

Introduction: A retrospective review was performed of 11 adult patients who underwent arthroscopic suture anchor triangular fibrocartilage complex (TFCC) repair between 2023 and 2025.

Methods: A retrospective review was performed of 11 adult patients who underwent arthroscopic suture anchor triangular fibrocartilage complex (TFCC) repair between 2023 and 2025.

Results: After a mean follow-up of 3.97 months (Range = 1.5 – 16 months, Median = 6 months), the percentage change in mean grip strength was - 0.83%. Postoperatively, the mean Quick Disabiliities of the Arm, Shoulder, and Hand (qDASH) questionnaire scores also showed significant decrease from 17.1 (preoperative: 9.09 – 27; postoperative: 0 – 2.5) to 0.8. The mean decrease in post-operative qDASH scores was -18.0.

Conclusion: This technique of arthroscopic suture anchor TFCC repair is a reliable and safe technique with minimal complications. It is a simple and reproducible technique for the repair of TFCC foveal tears.

Percutaneous Plate Fixation of Distal Radius Fractures: A Soft Tissue-Sparing Technique

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Introduction: Open reduction and internal fixation (ORIF) of distal radius fractures is the current standard for unstable patterns. However, it often involves extensive soft tissue dissection and the use of a tourniquet. This paper describes a percutaneous plating technique that achieves anatomic fixation while preserving the soft tissue envelope and minimizing iatrogenic complications.

Methods: A stepwise surgical approach is outlined, detailing patient positioning, percutaneous access routes, implant insertion, and reduction techniques. Emphasis is placed on anatomical landmarks and neurovascular protection.

Results: The technique was successfully applied in a consecutive series of patients, achieving radiographic union in all cases. Patients experienced reduced postoperative pain, rapid rehabilitation, and no neurovascular injuries or tendon complications.

Conclusion: This minimally invasive technique provides reliable fixation while preserving soft tissue integrity and reducing the risk of complications.

Fragility fracture cascade: meta-analysis on risk of subsequent hip fracture following an index wrist fracture

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Introduction: Upper limb fragility fractures often signal an underlying risk for more debilitating fractures in the future. Our meta-analysis quantifies the risk of subsequent hip fracture following a distal radius fracture. By understanding this critical link, clinicians can seize a key opportunity for early intervention.

Methods: We systematically reviewed available literature to examine the association between incident wrist fracture and subsequent hip fracture. Studies were identified by searching Pubmed, Web of Science, Embase, Medline and Scopus databases from their inception until Aug 2024. Studies were included if they reported hazard ratio (HR) for hip fracture following an initial wrist fracture. A random-effects model was used to pool HRs with 95% confidence intervals, and the certainty of evidence was assessed using the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) framework.

Results: Fourteen studies with over a million participants met the inclusion criteria. Meta-analysis revealed a significantly increased risk of hip fractures following a distal radius fracture. Pooled hazard ratio for subsequent hip fractures was 1.56 (95% CI 1.44 – 1.68) for females, 1.77 (95% CI 1.57 – 2.00) for males, and 1.49 (95% CI 1.36 – 1.64) for combined populations. Despite heterogeneity, the direction of effect was consistent across studies.

Conclusion: A distal radius fracture serves as a critical warning sign for future hip fractures. Clinicians should consider such fractures a red flag for underlying osteoporosis and initiate early intervention strategies. Incorporating this risk into clinical pathways could help disrupt the fragility fracture cascade.

Assessing Scaffold-guided Bone Regeneration using a 3D printed polycaprolactone-tricalcium phosphate (PCL-TCP) composite scaffold in a Rodent Model

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Introduction: Scaffold-guided bone regeneration is a technique that utilizes 3D printing technology to create a composite scaffold that is accurate in dimension of the bone defect, biocompatible for clinical use, and serves as a template for cell proliferation and ingrowth of new tissue. The new generation of 3D scaffold comprising of Polycaprolactone-Tricalcium Phosphate (PCL-TCP) had been translated for clinical utility in large bone defect of the cranium and lower limb with success. However, there is still a paucity of clinical studies for the use in upper limb defects. We aim to develop a more robust understanding in the basic sciences of tissue regeneration in a scaffold guided construct in a rodent model for translation to small bones in hand surgery. We hypothesise that 3D scaffold-guided bone regeneration is superior in bone regeneration when compared to native bone regeneration without autologous bone graft.

Methods: A total of 12 live Wistar rats were divided into two groups for this case control experiment. The right femur of each rat is exposed and a 3mm critical size defect is made at the mid shaft of the femur using an electric burr. A 1.3mm 4-hole locking plate was used for rigid
fixation of the fracture. In Group 1, the defect was created and left alone to allow for native bone regeneration. In Group 2, the PCL-TCP 3D scaffold was placed as an intervening bone graft at the defect site. The rats were monitored with adequate provision of analgesia and antibiotics in the post operative phase. At 12 weeks, the rats were sacrificed for radiological and histological analysis.

Results: At 12 weeks, 5 out of 6 rats in Group 1 showed complete bone healing with mature callus at the defect site. In Group 2, 3 out of 6 rats showed superior integration of bone forming cells into the scaffold with bridging callus across the defect, 2 out of 6 rats showed incomplete bridging across the scaffold. There were 2 cases of implant failure with one in each group.

Conclusion: 3D printed scaffold showed superior bone regeneration for critical sized defect of the long bone in a rodent model. The additional advantage includes the bioresorbable property, the provision of osteoconductive structural support for early weight bearing, while obviating the morbidity of autologous grafting. This can be a promising alternative for large bone defect in hand surgery.

Considerations in Heterotopic Replantations for Mangled Digits

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Introduction: Mangling hand injuries present significant reconstructive challenges, especially when multiple digits are involved. Heterotopic replantation is an option to maintain length and optimise function when conventional replantation is not feasible. We present 3 patients with severe multiple digit injuries who underwent heterotopic replantation and discuss them.

Methods: The first patient sustained avulsion amputations of the index, middle and ring fingers from a lathe machine. He underwent ray amputation of the index metacarpal and heterotopic replantation of the index to the middle, and middle to the ring finger. This allowed us to salvage the MCPJ.
The second patient sustained crush injuries of the thumb, index, middle and ring fingers with devascularisation of the index and middle fingers. He underwent ray amputation of the index metacarpal, fixation of the fractures and heterotopic replantation of the index to the middle finger to salvage the PIPJ.
The last patient sustained a severe crush injury to the index, and crush avulsion amputations of the middle, ring and little fingers from an excavator with significant soil biocontamination. He underwent ray amputation of the index and middle metacarpals and heterotopic replantation of the index and middle fingers to the 4-5th metacarpal bases. A gradual failure of the middle finger replant necessitated revision amputation and coverage with a contralateral flow through radial artery forearm flap to salvage the index.

Results: All replanted digits survived, and they returned for secondary procedures including arthrolysis and tenolysis 6 months later. At the last review, the first patient had returned to work on light duty, while the second patient was assessed for compensation and returned to his home country. The third patient remains on active follow up.

Conclusion:
- Mangling injuries are complex and require creative solutions for reconstruction.
- A ray amputation of the index metacarpal allows a wider web.
- Heterotopic replantation allow salvage of joints that may be need to be fused.

Bone Remodelling Potential of Paediatric Hand and Wrist Fractures: A Scoping Review

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Introduction: Bone Remodelling allows for the correction of fracture misalignment, making surgical anatomic reduction less essential for children. However an over-reliance on remodelling potential may lead to a permanent deformity. Thus, this scoping review aims at evaluating our current understanding of the remodelling potential of paediatric hand fractures, and its potential to guide management in the future.

Methods: A search was conducted on PubMed, Cochrane and Embase databases. Articles were included if they addressed the: (1) Paediatric population (2) Fractures of the hand and wrist (3) Follow up period of more than 3 months (4) Reported outcomes relating to skeletal bone remodelling. Studies that were excluded if they (1) Failed to separate between the adult and the paediatric population (2) Follow up period shorter than 3 months (4) Focused on fractures of the forearm such as fractures of the distal radius/ ulna region (5) Did not address outcomes relating to skeletal bone remodelling.

Results: A total of 6 articles met the inclusion criteria, with a total of 112 patients. Majority were case reports (n = 3), followed by retrospective studies (n = 2) and prospective studies (n = 1). Majority of the studies focused on phalangeal neck fractures (n = 5), with two studies focusing on phalangeal base fracture, with a

mean follow up of 31.9 months. Only 3 studies provided the changes in the angulation across the different planes. The changes in the fracture angulation for the rest of the studies had to be derived directly from the X-Ray films provided.

Conclusion: In summary, this study highlights the prominent lack of studies available regarding bone remodelling in of paediatric hand fractures, further emphasizing on the lack skeletal remodelling data and the need for more of such studies looking into bone remodelling in the paediatric population.

Tegaderm versus Hyphecan for Fingertip Injury Management: A Prospective Randomized Controlled Trial

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Introduction: Following its introduction in the 1990s, Hyphecan Cap gained popularity among orthopedic surgeons for managing fingertip injuries. Tegaderm, while offering similar benefits to Hyphecan, provides additional advantages as a non-allergenic, semi-permeable dressing that maintains sterility, prevents wound desiccation, and allows visual assessment. Its greater availability, lower cost, and transparent nature suggest it may serve as a superior alternative.

Methods: We conducted a prospective randomized controlled trial comparing Tegaderm and Hyphecan dressings for fingertip injuries. Patients admitted to our department between January 2021 and November 2023 were recruited, with follow-up clinic visits and telephone interviews conducted at least one year post-injury. Primary outcome was healing time; secondary outcomes included time to return to work, cold intolerance, hypersensitivity, and patient satisfaction scores.

Results: Among 57 recruited patients (28 Hyphecan, 29 Tegaderm), baseline characteristics showed no significant differences in age, gender, injury mechanism, or Allen classification. The Tegaderm group demonstrated significantly shorter mean healing time (4.3 vs. 5.9 weeks, p=0.006). Secondary outcomes showed no statistically significant differences between groups.

Conclusion: Tegaderm dressings resulted in faster healing compared to Hyphecan, with comparable secondary outcomes. Given its cost-effectiveness and practical advantages, Tegaderm represents a viable first-line option for fingertip injury management.

SHORT ORAL PRESENTATION

A Holistic Approach to Measuring the First Web Space in Children with Congenital Thumb Deformities

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Introduction: The first web space is essential for thumb opposition, pinch, and grasp. In children, however, assessment methods are not standardised. A wide range of outcome measures have been described, but results across studies are difficult to compare due to differences in methodology and clinical applicability.

Methods: We conducted a targeted search to identify representative paediatric studies on first web space assessment. Our initial seed papers were located via Google Scholar and hand search. Additional studies were identified through reference list screening and forward citation tracking. When gaps were suspected, focused queries were run in PubMed/Embase. Inclusion was based on clinical relevance (children/adolescents, first web space measurement techniques) rather than exhaustive capture. Data was extracted by the authors on the type of measurement and any available reliability, validity and feasibility information.

Results; 42 distinct instruments and classification systems were identified in total. Assessment methods were categorised into static anatomical or radiographic measures (14 methods), dynamic mobility tests (6 methods), functional task-based evaluations (8 methods), patient-reported outcome measures (PROMs) (4 methods), and condition-specific tools (8 methods). Static and radiographic techniques provided objective data but lacked sensitivity to functional change and normative paediatric references. Dynamic measures, like the Kapandji opposition score or goniometric recordings of abduction, quantified active thumb mobility but showed variable reproducibility. PROMs offered insight into patient and family perspectives but were rarely specific to the first web space function. Condition-specific classifications, such as the House classification for cerebral palsy or WIMEC score for hypoplastic thumbs, added diagnostic and surgical relevance but lacked broad validation. No method assessed anatomical, functional, and patient-reported domains comprehensively.

Conclusion: Existing methods for assessing the paediatric first web space are heterogeneous and inconsistently validated. The development of a composite, standardised, and clinically feasible outcome tool is essential to enable reliable research comparison, optimise surgical planning, and improve patient care.

Surgical Techniques for Wassel Type IV Pre-Axial Polydactyly of The Hand: A Case Series and Literature Review

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Introduction: Polydactyly represents an anomaly in the longitudinal segmentation of the limb bud. This aberration is typified by an increase in the division of the apical ectodermal ridge (AER), which creates a characteristic "ruffling" in the hand plate, rather than by an excess of substrate.(Kyriazis et al., 2023; Umair et al., 2018)
Polydactyly of the hand is the most common congenital upper limb anomaly encountered by pediatricians and hand surgeons.(Alzarmah et al., 2021) It can occur on the radial (pre-axial), central, or ulnar (postaxial) portion of the hand.(Kyriazis et al., 2023)

Radial polydactyly is relatively common and deserves special consideration because the treatment of thumb duplication is so critical, and its reconstruction is more complex than the reconstruction of the typical ulnar polydactyly.(Breidung et al., 2023) When addressing radial polydactyly, it is essential to approach treatment cautiously, emphasizing more than just removing the additional thumb.(Rogers et al., 2020)

Thumb reconstruction aptly captures the essence of the procedure, as it typically involves ligamentous reconstruction, angular correction, and tendon reconstruction.(Tiourin et al., 2023) This study aims to report and review the surgical approach for pre-axial polydactyly cases in Soeharso Orthopedic Hospital, Indonesia.

Methods: This study is a descriptive case series reporting three patients with pre-axial (radial) polydactyly of the thumb treated at Soeharso Orthopedic Hospital, Indonesia. All patients were classified as Wassel type IV based on clinical examination and radiographic assessment, including history taking, physical examination of the hand, and plain radiographs to evaluate bone and joint configuration.

Surgical management consisted of excision of the radial duplicated thumb using a racquet-shaped incision, with variations in incision design (volar short-line, lateral short-line, or extended proximal–distal lateral incision) according to soft-tissue and bony anatomy in each case. Reconstruction included preservation of the remaining thumb, with attention to bone alignment as well as reconstruction of ligaments, tendons, muscles, and neurovascular structures to achieve a stable and functional thumb.

Postoperative immobilization differed between patients: one patient received K-wire fixation, another received both splinting and K-wire, and one patient did not undergo immobilization. Clinical and radiographic outcomes, including deformity (such as zigzag deformity), stability, motion, and cosmetic appearance, were assessed during follow-up and qualitatively compared with techniques described in the literature, particularly the Bilhaut–Cloquet procedure.

Results: Three patients (two males, one female) with right-hand Wassel type IV preaxial polydactyly underwent radial thumb amputation using racquet-shaped incisions with three different designs (volar short-line, lateral short-line, and extended proximal–distal lateral incision). All patients had complete proximal and distal phalanges of the duplicated thumb, normal birth weight, unremarkable maternal and perinatal history, intact skin without edema or wounds, and normal routine laboratory findings.

Postoperative immobilization was performed with K-wire fixation in one patient, splint plus K-wire in another, and no immobilization in the third patient. During follow-up, two patients showed no postoperative complications, while one patient developed a zigzag deformity, representing the only noted complication in this small case series.

Conclusion: Pre-axial polydactyly Wassel classification type IV is the common congenital upper limb anomaly encountered by pediatricians and hand surgeon encounters. Thumb reconstruction, as the treatment of pre-axial polydactyly, is not simply a matter of excising the smaller digit. It requires attention for the bone, ligament, tendon, muscle, and neurovascular structure. Properly determining the age of surgery, Wassel type classification, incision design, post-operative immobilization, and surgical technique procedure yields optimal outcomes and reduces post-operative complications.

Combined wrist fusion and Sauve-Kapandji procedures in severe wrist deformity – a case report

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Introduction: Wrist and distal radioulnar joint arthritis are progressively degenerative conditions that impair function. Wrist fusion has long been the mainstay in treating wrist arthritis, as it provides stability and alleviates pain.1 Meanwhile the Sauve'-Kapandji procedure has shown significant improvement in patient outcomes by improving supination.2 In this case, we present a treatment plan combining both procedures to address the wrist pathology.

Methods: The patient sustained a closed distal end radius fracture with dorsal radioulnar joint injury. He was treated with open reduction, volar plating of the distal radius with ulna k-wiring in 2021. Post-operatively, the fracture malunited. He gradually developed contractures of the wrist and fingers, wrist pain with limited supination and pronation, as well as median nerve compressive symptoms. The patient presented to our hospital with a severe wrist deformity and minimal functional capability. Patient underwent removal of

implant, flexor tendons tenolysis with fractional lengthening, extended carpal tunnel release, wrist fusion and Sauve'-Kapandji procedure.

Results: The primary goal in salvaging a destroyed wrist is to create a stable and painless joint. Normal joint mobility restoration is a secondary goal.3 As with our patient, post traumatic cases of radiocarpal arthritis involving the lunate fossa after malunion of intra-articular distal radius fractures, radioscapholunate arthrodesis is advocated.3 The DRUJ arthritis resulted in the inability to perform supination and pronation. An additional Sauve'-Kapandji procedure was done to achieve forearm motion. Zhang et al performed a combination of both techniques for a patient with giant cell tumour of the distal radius. They achieved a mean of 75o supination and 70o pronation.4 In our patient, he managed to achieve a similar range of motion.

Conclusion: In severe wrist deformities with pain and stiffness, combined wrist fusion and Sauve-Kapandji procedure can be an alternative to wrist arthroplasty.

Scoping Review of Factors Which Affect Clinical Outcomes of Open Distal Radius Fractures

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Introduction: Distal radius fractures (DRFs) are common, accounting for 18% of all fractures, yet open DRFs (ODRFs) are uncommon, comprising only 6–13% of DRFs. Current open fracture guidelines advocate early antibiotic administration and urgent debridement but do not differentiate between upper and lower extremity injuries, with limited evidence specific to ODRFs. Although upper-limb open fractures generally have lower infection rates than lower-limb injuries, ODRFs remain clinically challenging due to risks of infection, nonunion, and functional impairment. This scoping review aims to identify factors influencing infection rates, bone healing, and functional outcomes in ODRFs.

Methods: Following PRISMA-ScR guidelines, relevant databases were searched for studies involving adults (≥18 years) with surgically treated ODRFs. Observational studies and randomised controlled trials reporting infection, bone healing, or functional outcomes were included. Non-English publications, paediatric studies, and case reports were excluded. Three reviewers independently screened studies and extracted relevant data.

Results: 8 articles were eligible for inclusion with 453 ODRF cases in total. Several studies showed low infection rates (0–4%) in low-grade Gustilo I injuries, whereas Type III injuries showed infection rates up to 30%, particularly in contaminated wounds. Early antibiotic administration was consistent across studies. Delayed debridement did not increase infection risk in Type I injuries; data for higher-grade injuries was limited. Immediate open reduction and internal fixation had lower complication rates comparable to closed fractures, while staged conversion from external to internal fixation showed higher complication rates, especially when conversion exceeded 14 days. Low-grade ODRFs achieved high union rates and long-term function comparable to closed fractures, whereas high-grade injuries required more revisions and had poorer early recovery.

Conclusion: Outcomes in ODRFs are mainly influenced by injury severity, wound contamination, and surgical approach. Low-grade injuries have low infection rates and favourable outcomes, while high-grade injuries carry higher complication risks. Evidence remains limited, highlighting the need for injury-specific guidance.

Scaphoid Fractures – Bridging the (Bone) Void with Conservative Management

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Introduction: Scaphoid fractures are the most common carpal fractures and carry a risk of delayed union, non-union, and avascular necrosis. Standard management of scaphoid fractures with a visible fracture gap or established non-union typically involves surgical fixation with or without bone grafting to restore stability, correct deformity, and promote union. While surgical fixation is increasingly advocated to promote early mobilisation, conservative immobilisation remains a viable option for stable, non-displaced fractures.

Methods: A retrospective case series was conducted at a tertiary hospital, identifying adults with late presentation, non-displaced scaphoid waist fractures managed conservatively. Clinical records and imaging were reviewed for mechanism of injury, duration to presentation, examination findings, and radiographic progression of healing. Serial plain radiographs, computed tomography (CT), and magnetic resonance imaging (MRI) were analysed to confirm non-union at presentation and subsequent union during follow-up.

Results: All patients achieved radiographic union with immobilisation alone. CT confirmed healing, and all were pain-free with functional wrist recovery at final follow-up, without complications or subsequent surgery.

Conclusion: This case series demonstrates that late-presentation, non-displaced scaphoid waist fractures can successfully achieve union with conservative immobilisation in appropriately selected, compliant patients over a prolonged treatment duration.

Midcarpal arthritis and its association with seronegative arthritis

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Introduction: Seronegative arthritis presents diagnostic and therapeutic challenges. The true prevalence of this condition is not well established, and uncertainties remain regarding its diagnostic criteria and clinical outcomes. We present our diagnostic approach and management of two cases of isolated mid-carpal arthritis presenting with atraumatic wrist pain. We investigate the relationship between midcarpal arthritis and seronegative arthritis, and hypothesize that midcarpal arthritis is a unique radiological feature of seronegative arthritis.

Methods: We analysed the demographics, presenting complaint and physical examination findings of 2 patients who presented our Hand clinic with isolated midcarpal arthritis. They were followed up for more than 3 months and reviewed by Hand Occupational therapists. Their laboratory results and imaging findings were compared. Basic hand radiographs revealed the presence of mid-carpal arthritis and further imaging with Magnetic Resonance Imaging (MRI) was ordered.

Results: Both patients had normal rheumatoid factor (RF) levels. It was the striking history of atraumatic wrist pain and presence of isolated midcarpal arthritis that raised our suspicions of an underlying inflammatory cause. Both patients were promptly referred to our Rheumatology colleagues and started on a course of steroids and Disease-modifying anti-rheumatic drugs (DMARDs). They achieved good symptom control with medical therapy, hence avoiding the need for salvage surgery.

Conclusion: Prompt recognition and diagnosis is paramount, but challenging in cases of seronegative arthritis. Diagnosis of seronegative arthritis is made when there are features of inflammatory arthritis, but absent immunoglobulin M (IgM) rheumatoid factor (RF) and circulating anti-citrullinated protein antibodies (ACPAs). From our studies, we propose that clinicians should have a high index of suspicion for this entity in young patients who present with atraumatic wrist pain. The presence of isolated midcarpal arthritis hand

and wrist radiograph is a distinguishing radiological feature that can help clinch the diagnosis, especially when interpreted in tandem with absent RF. Prompt referral to Rheumatology colleagues is important in starting patients on appropriate medical therapy. With good symptom relief from medical therapy alone, the risks and morbidity of salvage surgery can be avoided for these patients.

A Practical Adjunct for Root Grafting in Brachial Plexus Injury: Early Experience with a Nerve Detector

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Introduction: Early root grafting in brachial plexus injury (BPI) may reduce the need to sacrifice healthy donor nerves required for nerve transfer procedures. However, intraoperative identification of viable nerve roots remains challenging, as macroscopic evaluation and frozen-section pathology can be time-consuming and inconclusive. Integration of a nerve detector with intraoperative neuromonitoring may provide a simpler and faster alternative. We aim to report early experience with the use of a nerve detector integrated with intraoperative neuromonitoring during root grafting in brachial plexus injury.

Methods: A descriptive early-experience study was conducted in patients undergoing root grafting for BPI using an intraoperative nerve detector system. The device was employed to assist in identifying viable nerve roots prior to grafting. Intraoperative feasibility and technical challenges were evaluated.

Results: The nerve detector facilitated identification of functional nerve roots in complex surgical fields, supporting intraoperative decision-making and enabling early root grafting. Technical limitations were encountered in cases with very small nerve stumps, where probe flexibility and resistance from surrounding muscle reduced signal reliability. Occasional mismatch between the bipolar hook and nerve calibre also affected signal acquisition. No device-related complications were observed.

Conclusion: Early experience suggests that nerve detector systems integrated with intraoperative neuromonitoring may offer a practical, time-efficient adjunct for root viability assessment in brachial plexus injury, potentially reducing reliance on donor nerve sacrifice. Further studies are needed to refine device design and evaluate functional outcomes.

Stem Cell and Secretome Augmentation in TFCC Repair: Preliminary Clinical Evidence

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Introduction: Triangular fibrocartilage complex (TFCC) injuries frequently cause ulnar-sided wrist pain and functional limitation. While arthroscopic repair is the standard treatment, outcomes remain variable. Regenerative augmentation using mesenchymal stem cells and secretome may improve healing, but clinical evidence in TFCC injuries is limited. Our aim is to evaluate the early clinical outcomes and safety of stem cell and secretome augmentation compared with standard arthroscopic repair and conservative management in patients with TFCC injuries.

Methods: This single-center, randomized controlled preliminary study included 17 patients with symptomatic TFCC injuries. Patients were randomized into five groups: (A) arthroscopic repair with placebo, (B) arthroscopic repair augmented with umbilical cord–derived mesenchymal stem cells (UC-MSCs), (C) arthroscopic repair augmented with secretome, (D) arthroscopic repair augmented with combined UC-MSCs and secretome, and (E) conservative management. Early clinical outcomes were assessed at 3 months post-treatment using Visual Analog Scale (VAS), grip strength, Patient-Rated Wrist Evaluation (PRWE), and Disabilities of the Arm, Shoulder, and Hand (DASH) score.

Results: Overall, pain scores showed a trend toward improvement, with median VAS decreasing from 6 to 4 (p = 0.054). Grip strength demonstrated a statistically significant change (p = 0.001), although responses varied among groups. Greater pain reduction and functional improvement trends were observed in the UC-MSC and combination therapy groups compared with placebo and conservative management. PRWE and DASH scores improved modestly in operative and
regenerative groups, without statistically significant between-group differences. No complications such as wound dehiscence, swelling, or infection were noted in all groups.

Conclusio: In this preliminary randomized study, regenerative augmentation using UC-MSCs and secretome in TFCC repair appeared safe and clinically feasible, with early trends toward greater pain reduction and functional improvement compared with standard arthroscopic repair and
conservative management. These findings suggest a potential benefit of regenerative augmentation, warranting larger, adequately powered trials with longer follow-up to determine definitive efficacy.

A Comparative Assessment of Surgical Techniques for Carpal Tunnel Release: a Systematic Review

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Introduction: Carpal Tunnel Syndrome (CTS) is a musculoskeletal disorder which the median nerve is compressed. Incidence of CTS approximately 1 to 3 persons per 1000 in a year with prevalence of 50 per 1000 in United States. There were two surgical approaches for CTS including open carpal tunnel release (OCTR) and endoscopic carpal tunnel release (ECTR) approach. Therefore, we aimed to compare the outcome between ECTR and OCTR from several randomized controlled trials (RCTs).

Methods: This systematic review was conducted in accordance with the Preferred Reporting Items of Systematic Reviews (PRISMA) guidelines. We limited only RCTs from 2013 until 2023. Outcome parameters analysed were Boston Carpal Tunnel Questionnaire Symptom Severity Scale (BCTQ-S), Boston Carpal Tunnel Questionnaire Functional Status Scale (BCTQ-F), VAS score, and postoperative complications. Level of evidence was assessed by the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) guidelines.

Results: Seven studies with 271 hands in ECTR approach and 285 hands in OCTR approach were involved. Comparison results were BCTQ-S (MD=0.06), BCTQ-F (MD=0.02), VAS (MD=0.03), and complications rate (ECTR vs OCTR = 5 vs 9). All studies showed ECTR and OCTR gave similar result, although the difference was slightly.

Conclusion: ECTR and OCTR showed similar result based on BCTQ-S, BCTQ-F, VAS score, and postoperative complications. Although there were differences, this result must be interpreted with caution and not considered as definitive statement.

Accuracy of Ultrasonography Diagnostic Tests in Carpal Tunnel Syndrome (Electromyography-Nerve Conduction Velocity as Gold Standard)

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Introduction: Carpal Tunnel Syndrome is a collection of symptoms (pain in the median nerve distribution, numbness, tingling to motor weakness or muscle atrophy) due to ischemic compression of the median nerve. This causes a decrease in quality of life and disrupts work. EMG-NCV is a gold standard diagnostic tool with high sensitivity and specificity, but it is uncomfortable, high costs and inadequate number of devices.

Methods: The authors consider the use of ultrasound with a specificity of 86.8% and a sensitivity of 77.6%, providing more convenience, lower cost, and a greater number of devices available. Thus, diagnostic test research with a cross-sectional design was conducted

Results: Mid-carpal CSA on ultrasound with a cut point of 12.5 mm^2 showed sensitivity of 78% and specificity of 52.4% with predictive power of 74.7%.

Conclusion: Ultrasound test (Mid-Carpal CSA) is sensitive, non-specific, and accurate in diagnosing carpal tunnel syndrome.

Flexor Tendon Rupture After One Corticosteroid Injection in the Treatment of Trigger Finger: A Case Report and Literature Review

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Introduction: Corticosteroid injection is a widely accepted first-line treatment for trigger finger. Flexor tendon rupture is a rare complication—particularly after a single injection. We report a case of a 60-year-old woman who sustained a spontaneous flexor digitorum profundus and flexor digitorium profundus tendon rupture of the ring finger 2 months after a single corticosteroid injection for trigger finger. We review the literature on tendon rupture following corticosteroid injection and discuss underlying mechanisms.

Methods: We describe a 60-year-old woman who developed spontaneous flexor digitorum profundus and superficialis rupture of the ring finger two months after a single corticosteroid injection. A focused review of published case reports was performed to examine patterns and mechanisms of tendon rupture.

Results: Two mechanisms are described in the literature. Intratendinous injection may lead to tendon rupture under acute or heavy load, while repeated injections or prolonged steroid exposure predispose tendons to rupture during low-load or routine use through progressive collagen degeneration.

Conclusion : Our case highlights the potential risks associated with intratendinous injection and early return to heavy lifting. To minimize this risk, we recommend extra-tendinous injection using the lowest effective corticosteroid dose and delaying return to strenuous activity for at least three weeks.

Flexor Tendon Stretching in the Treatment of Trigger Finger

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Introduction: Trigger finger is a common disease with a lifetime risk of 2-3%. It is a condition that arises from the thickening and hardening of both the tendon and first annular pulley, and inflammation of the synovial sheath which often leads to the development of fibrinous adhesions between the gliding interface of the two tendons (FDP and FDS). This results in entrapment of the tendon at the first annular pulley and patients often present with pain, swelling, catching and restricted range of motion (and disability) of the affected finger. Histopathological findings reveal fibrocartilaginous metaplasia of the A1 pulley at the tendon-pulley interface. Management of trigger finger involves both non-surgical and surgical methods. Most patients undergo a trial of conservative treatment first. This includes activity modification, stretching exercise (static vs dynamic), annular pulley massage, splinting and steroid injection. Surgical treatment such as release of the annular pulley via percutaneous or open approach may be offered following failure of conservative treatment. Successful treatment is defined by complete resolution of finger pain and triggering. We note that all except one of the aforementioned treatment modalities serve to provide symptom relief without addressing the underlying pathophysiological cause of trigger finger. A1 pulley and flexor tendon stretching exercises are known to induce remodeling of the A1 pulley, flexor tendon or both, with the aim of achieving long-term resolution of trigger finger. Methods of A1 pulley stretching that have been described involve isometric PIPJ flexion with MCPJ at 0, 45 and 90 degrees of flexion. Chiba described a method for flexor tendon stretching that involves passive extension of MCPJ and IPJs at least 30 seconds each time, at least 10 times per day. However, existing literature does not describe the utility of flexor tendon stretching

exercises as a long-term treatment for trigger finger and there is no specific protocol/program for stretching of the flexor tendon. This study aims to evaluate the importance of flexor tendon stretching exercises in aiming for long-term resolution of treatment finger.

Methods : A retrospective case series analysis was performed using consecutive patients evaluated between September 2024 and December 2025. Patients were included in the study if they were diagnosed with at least 1 trigger finger by the author at the time of initial consultation. All patients were followed until resolution of symptoms. For each patient, we recorded the type and duration of treatment, and treatment outcome.

Results: 18 patients were treated conservatively for trigger finger. 10 patients were taught stretching exercise alone, 6 were taught stretching exercise in combination with steroid injection and 2 received steroid injection without trial of stretching exercise. Patients were followed up 6 weeks later. Out of the 10 patients who underwent stretching exercise alone, 4 achieved symptom resolution, 3 reported symptom improvement, 3 pending follow up. Of the 6 patients who underwent combined steroid injection and stretching exercise, 3 achieved symptom resolution, 3 pending follow up.
This suggests that it is possible to achieve complete resolution of trigger finger with flexor tendon stretching exercise alone, especially in low grade trigger fingers. In addition, stretching exercise is able to provide symptom relief in patients with higher grade trigger fingers. Data collection is ongoing and the data collection period may be extended to include more cases.

Conclusion: Flexor tendon stretching exercise is an important modality of conservative treatment to achieve long-term symptom resolution of trigger finger. There is a need for further pathobiological studies to determine the mechanism and effect of stretching exercise on trigger finger to guide type of exercises to be taught to the patient. In addition, a standardised protocol for flexor tendon stretching exercises would increase patient compliance, enforcement in clinical practice and allow for more accurate measurable outcomes.

Incidence of hip fractures after distal radius fractures

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Introduction: There has been no published literature on the incidence of hip fractures following distal radius fractures in Singapore. In Singapore with an ageing population, it is important to understand the relationship between distal radius fractures and hip fractures so that osteoporosis prevention and treatment programmes could be implemented promptly. The aim of the study is to find out if there is a significant incidence of hip fractures within 10 years after a distal radius fracture.

Methods: This is a retrospective review of 661 patients who sustained distal radius fractures from 1 January 2014 to 31 December 2014 in a single tertiary institution, and whether these patients suffered a hip fracture over the subsequent 10 year period.

Results: This study had 18.5% males with an average age of 61 years. 16% of patients were smokers, 18% had diabetes mellitus, 45% hypertension, 40% hyperlipidemia, 5% had osteoporosis. 39% had AO A type, 13% AO B type, while 47% had AO C type fracture. 10% of patients developed hip fractures, while 14% sustained other osteoporotic fractures such as vertebral compression fractures, distal radius fractures. In our multivariable analysis of 661 individuals, patients of older age ($P<0.01$) and previous osteoporotic fracture ($P<0.01$) were associated with development of hip fractures after initial distal radius fracture after adjusting for confounding factors.

Conclusion: As distal radius fractures are usually the first osteoporotic fracture that patients present with, patients may benefit from early intervention to prevent hip fracture in the future.

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