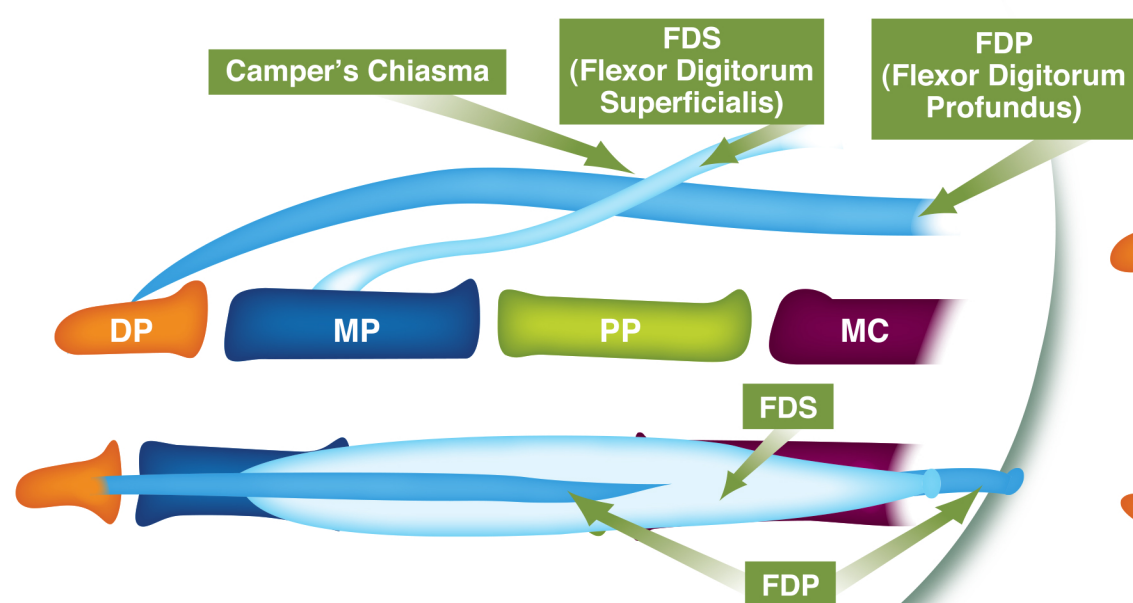


THE SONOGRAPHER'S

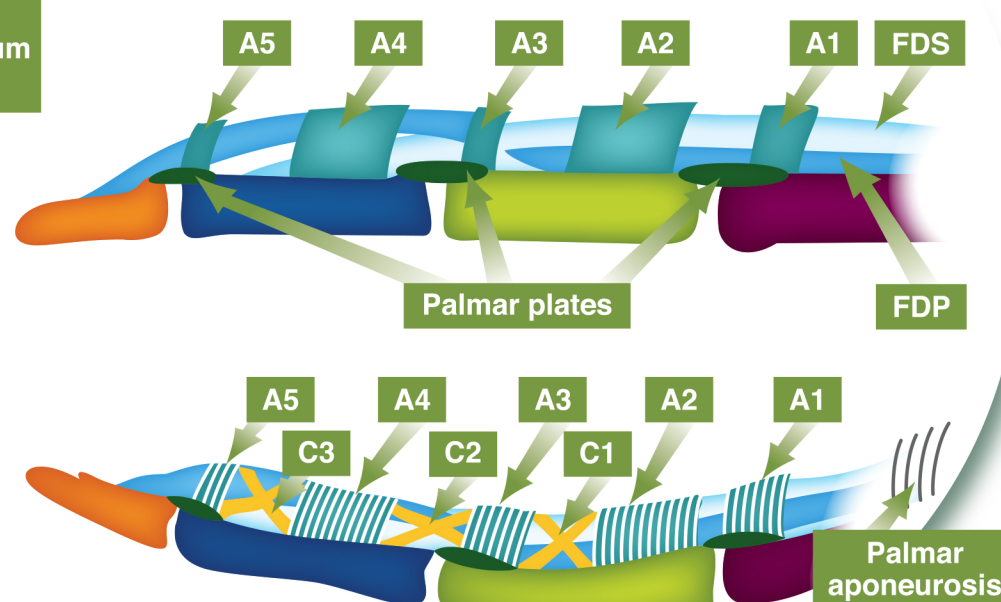
QUICK REFERENCE GUIDE

asa
australasian
sonographers
association

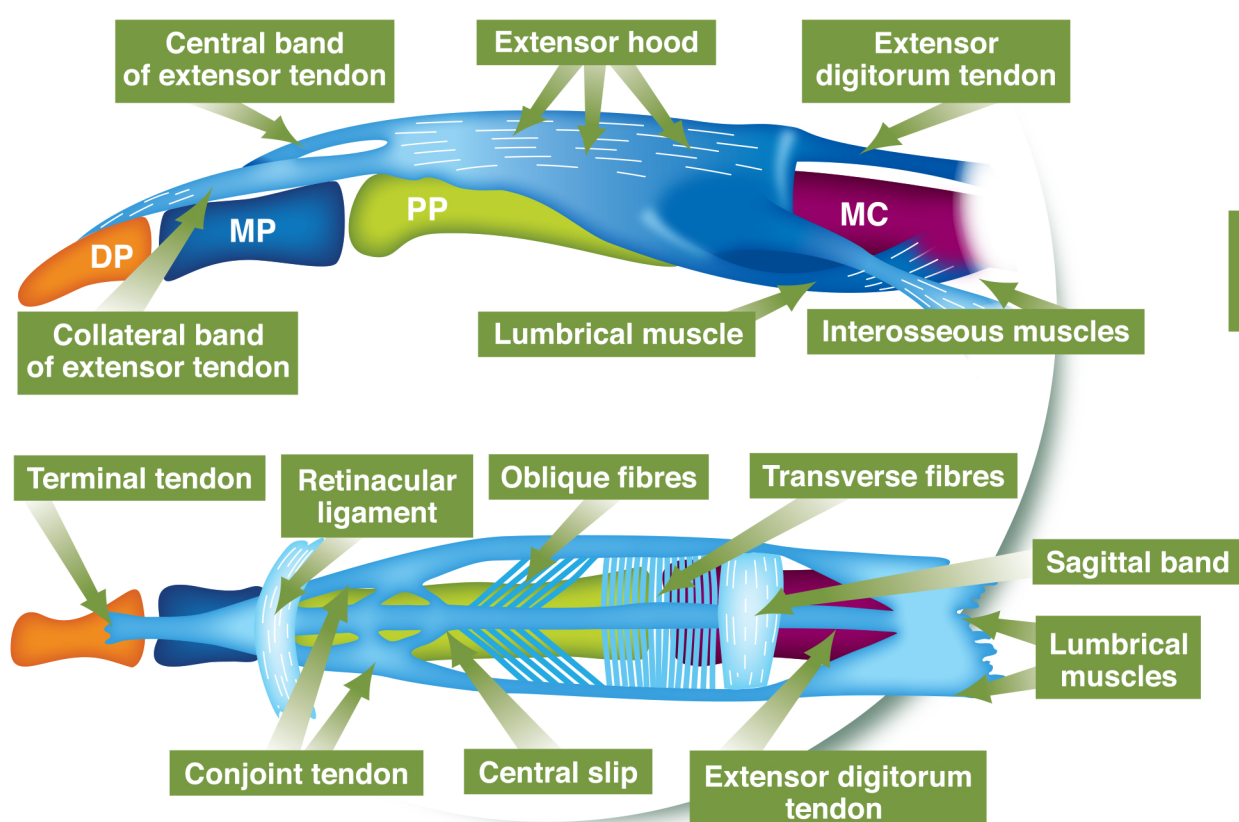
FLEXOR / PALMAR SIDE TENDONS



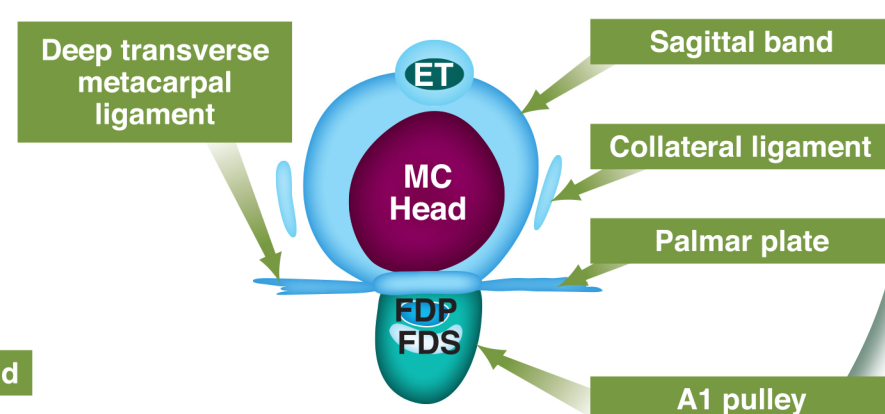
ANNULAR AND CRUCIATE PULLEY SYSTEMS



EXTENSOR / DORSAL SIDE

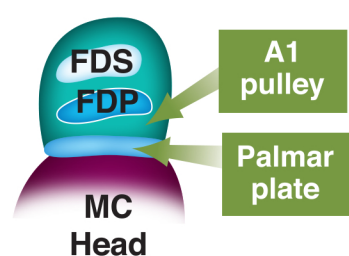


LEVEL OF METACARPAL HEAD

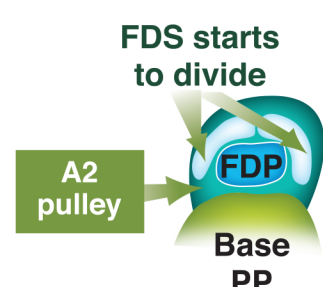


CROSS SECTIONAL IMAGES OF FLEXOR TENDONS

1 HEAD OF METACARPAL



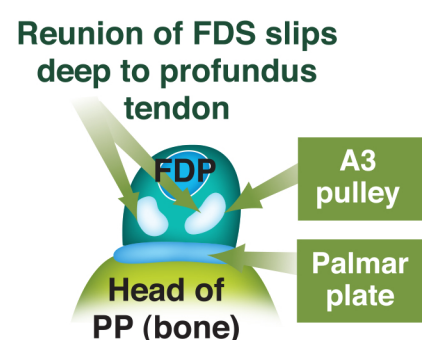
2 PROXIMAL PORTION / BASE OF PROXIMAL PHALANX



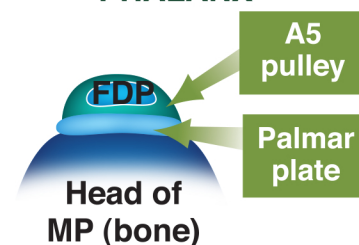
3 MID PROXIMAL PHALANX



4 HEAD OF PROXIMAL PHALANX



5 HEAD OF MIDDLE PHALANX



Common pathologies seen:

- Jersey finger:** unable to bend finger down into palm of hand. Due to FDP avulsion from base of distal phalanx and often retraction of FDP proximally.
- Mallet finger:** presents as painful and swollen DIP joint. Due to avulsion of the terminal extensor tendon (off the distal phalanx) and may lead to swan neck deformity.
- Swan neck deformity:** characterised by hyperextension of the PIP joint and flexion of the DIP joint. Caused by PIP palmar plate tear.

- Boutonniere deformity:** characterised by PIP flexion and DIP extension. Due to rupture of the central slip of the extensor tendon.
- Gamekeepers thumb:** pain in ulnar side of MCP joint of thumb. Due to tear of the ulnar collateral ligament of the MCP joint of the thumb. May involve a Stener lesion.
- Stener lesion:** occurs when the adductor aponeurosis becomes interposed between the ruptured UCL and its site of insertion at the base of the proximal phalanx.
- Dupuytren's contracture:** can present with nodules in palm or contracture of the MCP joint. Due to contracture and thickening of the palmar fascia.

© 2011 Australasian Sonographers Association Ltd. This poster remains the property of the ASA. No part may be reproduced without permission. The Education Committee gratefully acknowledges Michelle Fenech for the preparation of this poster.

References:

1. Bianchi S, Martinoli C. Ultrasound of the Musculoskeletal system. 2007. Munich, Germany. Springer.
2. Clavero J et al. MR Imaging of Ligament and Tendon Injuries of the fingers. Radiographics. 2002; (22): 237-256.
3. Hauger, O et al. Pulley System in the fingers: normal anatomy and simulated lesions in cadavers at MR imaging, CT and Ultrasound with and without contrast material distension of the tendon sheath. Radiology. 2000; (217): 201-212.
4. Lee J, Healy J. Normal Sonographic anatomy of the wrist and hand. Radiographics. 2005; (25): 1577-1590.
5. Netter F. Atlas of Human anatomy 4th Edition. 2006. Boston, USA. Saunders.
6. Weinzeig J. Plastic surgery secrets plus 2nd Edition. 2010. Philadelphia, USA. Mosby Inc.

Anatomical variations may exist

Disclaimer: © 2023 Australasian Sonographers Association Ltd. The Australasian Sonographers Association gratefully acknowledges the Sonographer Women's Health Special Interest Group committee for preparation of this poster. This poster remains the property of the Australasian Sonographers Association. No part of it may be reproduced without permission. Disclaimer: The information in this publication is current when published and is general in nature; it does not constitute professional advice. Any views expressed are those of the author and may not reflect ASA's views. ASA does not endorse any product or service identified in this publication. You use this information at your sole risk and ASA is not responsible for any errors or for any consequences arising from that use. Please visit www.sonographers.org for the full version of the Australasian Sonographers Association publication disclaimer.



sonographers.org

FINGER ANATOMY