

Upper Extremity Traumatic Nerve Injury In Adults

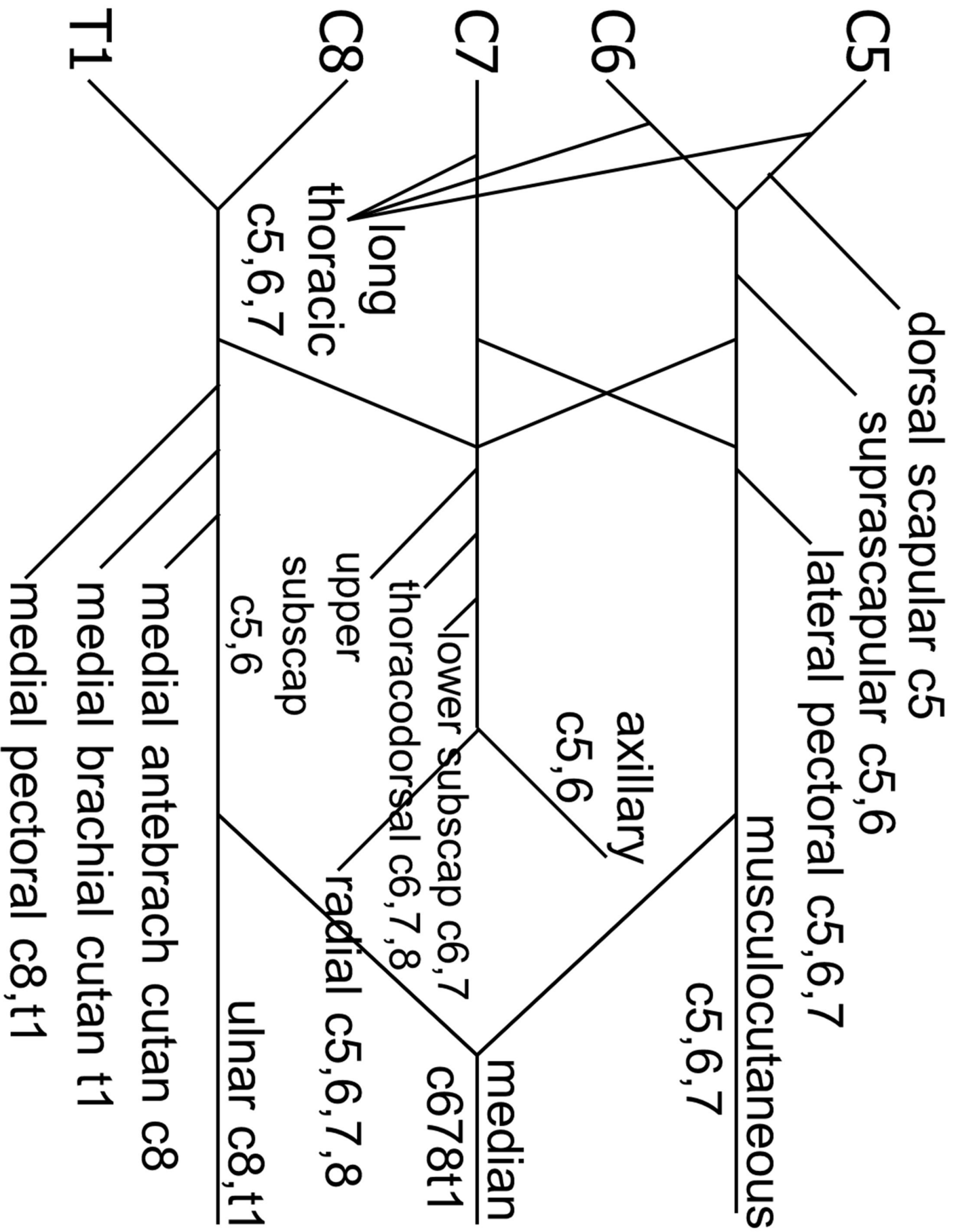
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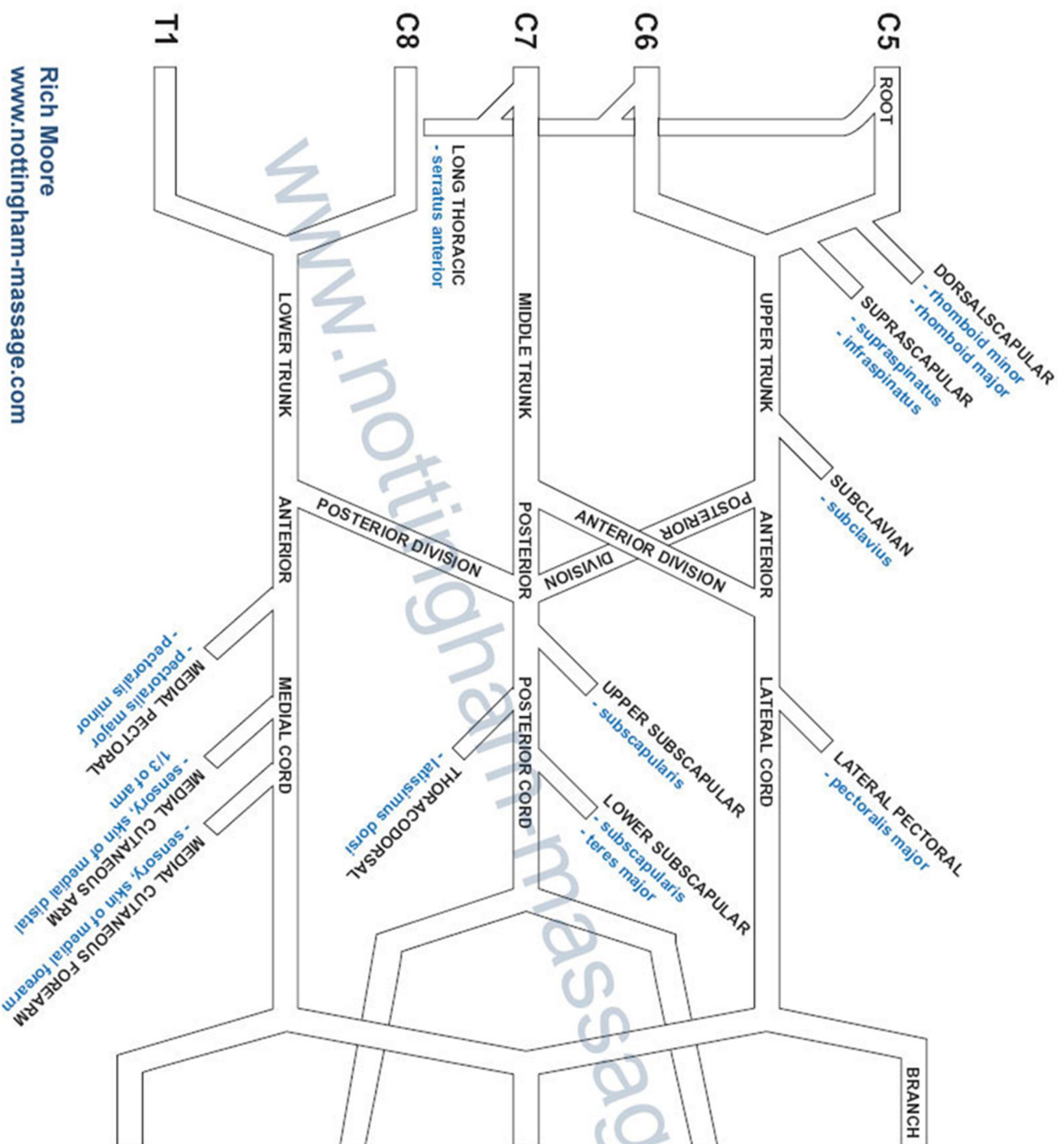
February 5, 2014

SUGGESTION! Bring page 2 and 3 of this handout to the lecture!
Sit back, relax and take in the lecture. Study it later!

- I. Brachial Plexus Anatomy
- II. Peripheral Nerve Anatomy
- III. Physiology of Nerve Injury and Repair
- IV. Common Patterns and mechanisms of Traumatic Brachial Plexus Injuries
- V. Preoperative Evaluation of Traumatic Brachial Plexus Injury
 - a. Physical Exam
 - b. Electrodiagnostic Evaluation
- VI. Surgical Repair/Reconstruction Options
 - a. Direct Nerve Repair
 - b. Nerve Graft
 - c. Intraplexal Nerve Transfers
 - d. Extraplexal Nerve Transfers
 - e. Tendon Transfers
 - f. Free Functioning Muscle Transfers
- VII. Reconstruction Decision Making and Timing
- VIII. Case Examples
 - a. Complete Plexus
 - b. Upper Plexus
- IX. Basic Principles of Post-Operative Rehabilitation of Brachial Plexus Reconstructions

NOTE: The Powerpoint slides of this presentation will be available shortly before the presentation at www.handtherapyhub.com





MUSCULOCUTANEOUS

- = flexors of arm
- biceps
 - coracobrachialis
 - brachialis

RADIAL

- = posterior arm & forearm
- triceps brachii
 - anconeus
 - brachioradialis
 - ECRB
 - supinator
 - extensor digitorum
 - extensor carpi ulnaris
 - abductor pollicis longus
 - extensor pollicis brevis
 - extensor pollicis longus
 - extensor indicis

MEDIAN

- = anterior forearm
- pronator teres
 - flexor carpi radialis
 - palmaris longus
 - flexor digitorum superficialis
 - flexor digitorum profundus
 - flexor pollicis longus
 - pronator quadratus
 - + 1st & 2nd lumbricals
 - + thenar eminence

AXILLARY

- deltoid
- teres minor

ULNAR

- flexor carpi ulnaris
- flexor digitorum profundus
- + Intrinsic hand muscles:
- opponens digiti minimi
- abductor digiti minimi
- flexor digiti minimi brevis
- adductor pollicis
- 3rd and 4th lumbricals
- dorsal interossei
- palmar interossei
- palmaris brevis

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