

normal). A symmetrical appearance of complete bone fusion of the capitate and trapezoid was seen bilaterally with no other abnormalities. In this case it's unlikely that the patient's more generalised joint pain is related to the synostosis particularly as the appearances suggest the fusion has been present for a very long time. Symptoms of synostosis are more typically to do with movement limitation or are positional. Although it is possible to have fusion of any two adjacent ossification centres in the wrist, it is most commonly lunate-triquetral with capitate-hamate (particularly in Apert syndrome), trapezium-trapezoid, scaphoid-trapezium and scaphoid-lunate also occurring more frequently. There have only ever been a few cases of capitate-trapezoid synostosis recorded.

P11. CHALLOUMAS, DIMITRIS, FIDEL PEAT AND CECILIA BRASSETT. The Human Anatomy Teaching Group, Department of Physiology, Development and Neuroscience, University of Cambridge, Downing Site, Cambridge, UK. **Discrepancies in descriptions of dermatomal distribution in the shoulder and upper back**

A good knowledge of dermatomes is key to accurate localisation of nerve lesions. However, descriptions of dermatomal distribution in the shoulder and upper back vary considerably. In this study, dermatome maps in 30 anatomy textbooks and 18 medical websites were reviewed to elucidate the extent of such discrepancies. The "regimental badge" area on the superolateral aspect of the arm is clinically significant, as sensory loss in shoulder dislocation is indicative of axillary nerve injury. In 28/48 (58%) diagrams, this was shown to be supplied by C5, whilst C4, C6 and C7 were indicated in 3, 12 and 5 diagrams respectively. However, the accepted root values of the axillary nerve comprise only C5 and C6. A similar lack of clarity exists in the depiction of upper back dermatomes, which were described in only 41/48 (85%) sources. Among several variations, the cutaneous distribution of the posterior primary rami of C5-T1 was drawn as narrow transverse bands in 15 (37%) diagrams; and in 13 (32%) maps, the dermatome for C4 adjoined that of T2, with no intervening dermatomes. While confirming the ambiguity surrounding dermatomes of the shoulder and upper back, this study highlights the need for further investigations to achieve more specific delineation.

P12. LLOYD, THOMAS, WEN PENG YONG and CECILIA BRASSETT. Human Anatomy Teaching Group, Department of Physiology, Development and Neuroscience, University of Cambridge, Downing Street, Cambridge, CB2 3DY. **Comparative analysis of limb anatomy as depicted by da Vinci and Vesalius, with reference to a modern curriculum**

In recent years, there has been growing interest in the anatomical illustrations of Leonardo da Vinci and their relationship to those published by Andreas Vesalius. In this study, drawings of upper and lower limbs in Leonardo's *Anatomical Manuscripts* and Vesalius' *De Humani Corporis Fabrica* were examined. Comparison was made to current anatomical publications through a simple matching coefficient, whereby correct representations were allocated a score of 1 and incorrect allocated a score of 0. Total score per author was presented as a percentage of accurate representations from all structures examined, giving an overall 'percentage similarity score'. The analysis was presented according to the dissection sequence used in our anatomical curriculum. The overall percentage similarity score for Leonardo's *Anatomical Manuscript A* were 73% and 65% for upper and lower limbs respectively, compared to 86% and 93% in Vesalius' *Fabrica*. The greatest discrepancies were found in deeper muscle layers and neurovascular structures. Despite previous suggestions that Leonardo's sketches depicted anatomical features more accurately, the current study would indicate that Vesalius' work on the limbs portrayed a greater detail of morphological anatomy. Analysis by similarity index is a useful tool that can also be applied to other body systems alongside previous qualitative analyses.