Ultrasound Guided Procedures in Anaesthesia

Hebbard, Barrington & Royse www.heartweb.com.au

Lumbar Paravetebral (Lumbar Plexus) block

Like the spine the lumbar plexus is at the frontier of ultrasound guided procedures. Imaging can be performed in both the longitudinal and transverse orientations usually with a curvilinear lower frequency probe.

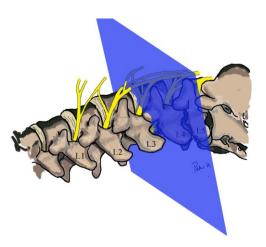


Fig 4.38 Plane of transverse imaging of the lumbar plexus between the transverse processes.

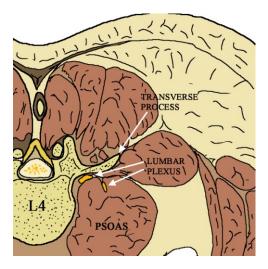


Fig 4.39 diagram transversely through L4 transverse process showing position of lumbar plexus.

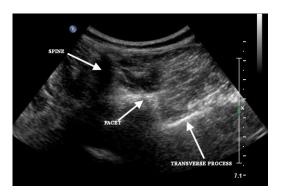


Fig 4.40 sonogram through section as above, deep structures are shadowed by bone and fine detail is lost due to the overlying muscle which is highly attenuating to ultrasound.

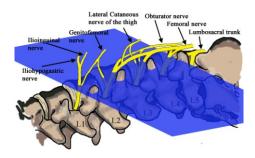


Fig 4.41 diagram of parasagittal plane through the distal transverse processes and lumbar plexus



Fig 4.42 sonogram of longitudinal parasagittal plane through distal transverse process showing the easily recognised deep shadowing, when 3 transverse processes are imaged called the "trident sign"

Ultrasound Guided Procedures in Anaesthesia

Hebbard, Barrington & Royse www.heartweb.com.au

In describing this ultrasound guided procedure it has been assumed that attention has been paid to appropriate location, personnel, sterility, preparation, doses and technique necessary for the safe conduct of major nerve blocks and other procedures. These medical procedures should not be attempted without suitable qualifications

Acknowledgements

Thanks go to the Ecole Polytechnique Federale de Lausanne for the excellent anatomical slices that can be obtained from the data set of the Visible Human Project via their website at http://visiblehuman.epfl.ch/