

The role of ultrasound in head and neck therapeutic interventions

Seyed mohammadreza haji seyed abootorabi,

Anesthesiologist, Pain fellowship, private practice



Ultrasonography has multiple advantages over traditional radiologic imaging modalities when used for interventional procedures. It allows improved visualization of the anatomy while avoiding ionizing radiation and risks associated with contrast use. It has proved superiority at accuracy of delivery and procedural effectiveness over blind procedures when used in association with interventional pain procedures. Although limited in its ability to see through bony structures, ultrasound has utility in visualizing soft tissues and vascular structures in anatomic regions of interest resulting in increased use for posterior neuraxial, periaxial, peripheral nerve and joint-related structures. Current evidence for use in these settings is presented here. In some cases, optimal utility may be improved by combining ultrasonography with other imaging modalities.

Ultrasound imaging is a suitable and reliable tool to study the muscles and fasciae of the head and neck region.

cervical sympathetic ganglion block, trigeminal nerve and greater occipital nerve block, third occipital nerve and medial branch block, and cervical selective nerve root block are discussed . The review begins with in depth discussion about the anatomy of the target nerve, followed by reviewing the available literature on the indications for the procedures. Detailed description of the procedure techniques is also presented. The volume and selection of medications is also discussed if there is available research. The review will conclude with summary of side effects, complications and precautions