



Intravenous literature: Moureau, N., Lamperti, M., Kelly, L.J., Dawson, R., Elbarbary, M., van Boxtel, A.J. and Pittiruti, M. (2013) Evidence-based consensus on the insertion of central venous access devices: definition of minimal requirements for training. *British journal of anaesthesia*. 2013 Jan 29. .

Abstract:

There is a lack of standard minimal requirements for the training of insertion techniques and maintenance of central venous access devices (CVADs). An international evidence-based consensus task force was established through the World Congress of Vascular Access (WoCoVA) to provide definitions and recommendations for training and insertion of CVADs. Medical literature published from February 1971 to April 2012 regarding ‘central vascular access’, ‘training’, ‘competency’, ‘simulation’, and ‘ultrasound’ was reviewed on Pubmed, BioMed Central, ScienceDirect, and Scopus databases. The GRADE and the GRADE-RAND methods were utilized to develop recommendations. Out of 156 papers initially identified, 83 papers described training for central vascular access placement. Sixteen recommendations are proposed by this task force, each with an evidence level, degree of consensus, and recommendation grade. These recommendations suggest central venous access education include didactic or web-based teaching with insertion procedure, infection prevention, complications, care, and maintenance of devices, along with laboratory models and tools for simulation practice incorporating ultrasound. Clinical competence should be determined by observation during clinical practice using a global rating scale rather than by the number of procedures performed. Ensuring safe insertion and management of central venous devices



requires standardized education, simulation practice, and supervised insertions.

