

Antiseptic solutions for skin preparation during central catheter insertion in neonates

ABSTRACT

Central venous catheters (CVCs) are flexible, long catheters inserted through the skin, or occasionally via a surgical incision, into the right atrium or one of the great vessels such as the vena cava, subclavian vein, femoral, common iliac, or umbilical vein (CDC 2020; Dongara 2017; Smith 2013). CVCs are used to administer fluids (e.g. parenteral nutrition, blood products, or medications, e.g. inotropes) and to monitor haemodynamic status. In 1994, the estimated total number of central catheters inserted in adult and neonatal intensive care units (NICUs) in the UK was 200,000, and a rise in the number of insertions is expected (Smith 2013). In the USA, at least 30% of all infants admitted to NICU will have had CVCs inserted at some stage in their NICU stay (Soares 2018). CVCs are usually inserted into either peripheral veins or the umbilical vein in neonates.