
Abstract:

BACKGROUND: Data was prospectively collected on 850 consecutive patients undergoing central venous catheterisation (CVC) to receive total parenteral nutrition (TPN) in a major university teaching hospital over a 46 months period.

METHODS: Data included information about CVC insertion and clinical outcomes, most notably, suspected catheter-related blood stream infections (CRBSI).

RESULTS: The internal jugular vein was the most common site (n = 882, 68%), followed by the subclavian vein (n = 344, 24.6%) and femoral vein (n = 95, 6.5%). The CRBSI rate per 100 line feeding days was 0.93% in patients cared for in a non ICU setting versus 1.98% for ICU managed patients. The mean number of line days preceding a pyrexial spike was 13.1. CRBSI was commonest in patients with femoral lines (n = 21/95, 22.1%), especially those cared for in a non-ICU setting (29.6% versus 14.5% for those in the ICU group). Preference should be given to internal jugular or subclavian-sited CVCs in ICU and non-ICU patients to reduce the risk of CRBSI. If femoral catheterisation is unavoidable, strict attention to aseptic technique is mandatory.
CONCLUSION: The aim of this study was to investigate the rate and pattern of CRBSI and to recommend changes in protocol, technique and equipment as deemed necessary from these findings.