PICC is a safe and efficient alternative in contrast to CVC for providing venous access for calcium supplementation in surgical patients after parathyroidectomy” Qi et al (2017).

Abstract:

BACKGROUND: Intravenous calcium supplements are often required following parathyroidectomy to avoid postoperative hypocalcaemia. The aim of this study was to compare application effect of a femoral central venous catheter (CVC) and peripherally inserted central catheter (PICC) on intravenous calcium supplements after parathyroidectomy.

METHODS: We retrospectively reviewed the hospital records of 73 patients with secondary hyperparathyroidism who underwent a successful parathyroidectomy at the Huashan Hospital attached to Fudan University between 1 April 2011 and 1 February 2016.

RESULTS: Of the 73 study participants, 39 (53.4%) had a PICC and 34 (46.6%) had a CVC, respectively. Patients in the CVC group needed 6-7 days of intravenous calcium supplements, while patients in PICC group needed only 2-3 days to achieve normal serum calcium.
concentration (2.2-2.6 mmol/L). Furthermore, the duration of calcium supplementation was 71.62 ± 4.48 hours in PICC group and 100.4 ± 5.43 hours in CVC group (P < 0.05). Of the patients in PICC group, the incidence of catheter occlusion, operation failure and hypocalcaemia was 0%, which was significantly lower than those in CVC group (2.56%, 7.69% and 7.69%, respectively).

CONCLUSIONS: PICC is a safe and efficient alternative in contrast to CVC for providing venous access for calcium supplementation in surgical patients after parathyroidectomy.

Reference:
