Abstract:

Background: Peripherally inserted central catheter (PICC) has been widely used. The catheter-related complications might occur and the reports of secondary malposition into azygos veins were rare.

Methods: This retrospective review summarized the experience in diagnosis and management of secondary malposition of PICC into azygos veins in 25 cases.

Results: When the catheter dysfunction occurred in the PICC on the left limb, it was necessary to consider whether there would be malposition into azygos veins after other reasons were excluded. The malposition could be diagnosed by chest lateral radiograph or chest computed tomography. The secondary malposition into azygos veins was resolved by repositioning or withdrawing the PICC. After re-inserting the catheter, it should be closely monitored whether the malposition occurred again. Intracavitary electrocardiogram positioning technology was used to confirm the catheter tip position before using corrosive drug. After the catheters withdrawn from the azygos veins, close attention should be paid to the property and concentration of the infusion drug strictly and the complications such as blockage and re-malposition. No serious complications such as infection, thrombosis and extravasation occurred in this group of patients after treatment.

Conclusions: The results of our study suggested that the right limb is recommended for PICC catheterization in order to avoid secondary malposition into azygos veins and the malposition into azygos veins should be dealt with in time.

Reference: