



Girebu Picc Trainer, A Peripherally Inserted Central Catheter Insertion Training Innovation

KEYWORDS

PICC, Trainer, Innovation

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ABSTRACT A Peripherally Inserted Central Catheter (PICC) insertion training innovation, Girebu trainer is a cheap, simple locally made innovation which has immense utility in training doctors & nurses on insertion of PICC. All sick neonates, infants & children need IV fluid therapy for longer duration, necessitating use of PICC. It is difficult to put PICC effectively unless trained & hence there is less use of PICC. To train the technical resource the Girebu PICC trainer has been innovated. It has been pilot tested by 20 learners with mixed composition with definite positive outcome in terms of skill confidence & attitude.

Introduction

All sick neonates, infants & children need IV access for long duration for administering fluids, electrolytes & drug therapy. PICC is a very useful device to permit such intravenous administration with a single prick at the time of insertion of PICC. Insertion of PICC is a highly skilled procedure & if the inserter is not trained then the PICC may not get inserted or may get malpositioned with consequent complications. At present, marketed PICC insertion trainer are few, not easily available & costly. To overcome this difficulty an indigenous, the Girebu PICC trainer has been innovated.

Innovation

The Girebu trainer has a plywood plate of size 20" X 2.5" X 0.5" acting as a limb. In the middle part, a 2.5" roll of bandage has been glued to plywood with quickfix adhesive glue. A black soft rubber tube of 2.5" length & of a diameter which can just accept tightly Romson's feeding tube of FG 8 has been fixed longitudinally over prefixed bandage roll to act as a vein segment. A soft nonwoven elastic adhesive tape of white colour of 2" width & 6" length is encircled over the black rubber tube simulating skin & subcutaneous tissue. A Romson's feeding tube of FG 8 is cut at 3" distance from hub. The proximal piece of the feeding tube is attached with 2 cc Syringe & fixed at one end of the wooden ply plate. The other end of the proximal piece of NG tube is inserted in the distal end of black rubber tube. While the proximal end of black tube is connected with proximal end of the distal piece of feeding tube. The proximal end of the distal piece is dipped through the cover of a 300 cc plastic jar fixed on the other end of the ply plate, simulating heart. The jar is filled with red coloured fluid & the fluid is sucked with 2 cc syringe so as to fill the entire simulated venous line depicted by feeding & black rubber tube & thus system is ready for pricking & insertion of PICC. (figure1)

We used a preused PICC for training purpose & trained a batch of 20 persons comprising nurses & residents. We also compared training of the same batch with branded PICC training simulator. The training comfort & each was much better in Girebu. (figure 2)

Conclusion

The Girebu PICC trainer is a unique, cheap, PICC trainer innovation, if used effectively has a potential to produce a quantum jump in use of PICC with significant positive im-

pact on intact survival of small babies.

Acknowledgement

I wholeheartedly appreciate intense contribution of Surg Capt (Dr) Rebu Koshi, of Indian Navy in development of the Girebu innovation.



Figure 1: Girebu PICC trainer



Figure 2 : Girebu PICC trainer training session