Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/mjafi

Letter to the Editor

Unique complication during central venous catheterisation: “Needle dislodgement”

Dear Editor,

Central Venous Catheter (CVC) insertion is one of the most commonly performed procedures in operation theatres and Intensive Care units. Unintended arterial puncture is the most common acute complication, with incidents ranging from 1.9% to 15%.¹

There are numerous complications documented for CVC but the complication mentioned in this letter defies all the imagination of health care workers in Operation Theatres and Critical care units.

A 23 years old male patient was brought in semiconscious state by relatives to the casualty with history of slipping off in bathroom at same day morning.

Urgent CT scan revealed Bilateral frontoparietal Intracerebral bleed with midline shift of 16 mm. Patient was immediately taken up for Decompressive Craniotomy.

Patient was brought inside operation theatre and intubated using 9 mm internal diameter Endotracheal tube following proper protocols for premedication, induction and intubation.

After fixing the tube and shifting on volume controlled ventilation, patient was positioned for Central Venous Catheter (CVC) insertion.

With patient supine and head low at 10° an attempt was made to insert 7 Fr Triple Lumen CVC into right Internal Jugular Vein (IJV) using Seldinger Technique with the help of landmarks.

Following insertion blood was freely aspirated and good forward flow was tested using normal saline to ensure no resistance to flow.

While inserting guidewire by 10 cm it was suddenly noticed that the needle from the syringe has got broken off and was moving with the guidewire into the IJV. The procedure was stopped and needle was carefully removed and secured Figs. 1 and 2.

Fig. 1 – Needle broken off from the syringe while inserting guidewire of central venous catheter at around 10 cm.

Fig. 2 – Needle isolated and safely secured. Syringe without needle can be seen.

Guidewire was carefully inserted and rest of the procedure subsequently was uneventful.

Patient was then handed over to the surgeon.

Concept of Central venous catheterisation was introduced in 1929 when Forssmann described the advance of a plastic tube to the heart by puncturing his own arm vein in year 1929.² Since then, CVC has refined and progressed by leaps and bounds to its present state when it is one of the most common procedure in intensive care and operation theatres.

Inadequately embedded needle into the hub during manufacture can be one reason of dislodgement of the needle from the hub of this syringe.

In addition to an extreme vigilance for such a disaster, adequate reporting of such manufacturing defect must be reported through proper channel to minimise recurrences in future.

REFERENCES

1. Shah KB, Rao TLK, Laughlin S, El-Etr AA. A review of pulmonary artery catheterisation in 6,245 patients. *Anaesthesiology*. 1984;61:271–275.
2. Forssmann W. Die Sondierung des rechten Herzens. *Klin Wochenschr*. 1929;8:2080.

Maj Gunjan Singh*

Graded Specialist, Anaesthesiology, Military Hospital, Shillong
793001, India

*Tel.: +91 (0) 9612112136 (mobile).

E-mail address: gunjanafmc@gmail.com

20 April 2014

Available online 11 February 2015

0377-1237/\$ – see front matter

© 2015, Armed Forces Medical Services (AFMS). All rights reserved.

<http://dx.doi.org/10.1016/j.mjafi.2014.11.010>