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Coiling of guidewire in the internal jugular vein: Putting some caveats

Sir,

We wish to raise certain issues regarding the article ‘Coiling of guide wire in the internal jugular vein during central venous catheter (CVC) insertion: A rare complication’.^[1] Several anatomic features make the left side less attractive than the right.^[2] The tortuous course of the vein on the left side partly contributes to the higher rate of coiling through this route. Although the authors ‘experienced mild resistance’ during threading of the guide wire, they stopped only after introduction of about half the length of guide wire. They certainly ignored the initial resistance leading on to guide wire getting fully coiled inside the vein. It is prudent to stop at the earliest moment at the feeling of ‘some resistance’ and check, re-check and further check the position of the guide wire with fluoroscope or with the help of bed-side ultrasound. How much resistance constitutes ‘significant resistance’ is poorly defined in the literature and remains one of clinical wisdom.^[3] Unfortunately, two additional attempts were done by other operators even after the initial extraction effort. Instead of repeated attempts, the authors should have evaluated the position of guidewire by ultrasound or fluoroscopy, whichever is readily available. Real-time ultrasound-guidance can facilitate CVC placement and is of interest nowadays.^[4]

In contrast with authors’ view, morbid obesity and coagulopathy cannot be held directly responsible for kinking or looping of the guide wire. In fact, unavailability of peripheral veins in morbid obesity may lead to a compulsion for CVC placement. Morbid

obesity may impose difficulty in identification of landmarks. Patients with low or high body mass index, local scarring and history of prior surgery involving the site – are challenges to CVC placement.^[2]

Any 1st-time occurrence of rare complication may be missed owing to lack of awareness. Hence, there is need of such reporting which will increase our awareness. Gibson and Bodenham^[5] proposed a useful aide memoire with regard to misplaced CVCs; in the short term, ‘if in doubt, don’t take it out’. Evaluation followed by removal under vision after adequate exposure is the approach of prudence. This is in contrast with endotracheal intubation where it is said that ‘if in doubt, take it out’.

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REFERENCES

1. Pal RK, Laha B, Nandy S, Biswas R. Coiling of guide wire in the internal jugular vein during central venous catheter insertion: A rare complication. *Indian J Anaesth* 2014;58:786-8.
2. Central Vein Catheterization. Available from: <http://www.surgery.uc.edu/content/Education/residentresources/Central%20Venous%20Access%20Procedure.pdf>. [Last accessed on 2014 Jan 16].
3. Khan KZ, Graham D, Ermenyi A, Pillay WR. Case report: Managing a knotted Seldinger wire in the subclavian vein during central venous cannulation. *Can J Anaesth* 2007;54:375-9.
4. Tokumine J, Lefor AT, Yonei A, Kagaya A, Iwasaki K, Fukuda Y. Three-step method for ultrasound-guided central vein catheterization. *Br J Anaesth* 2013;110:368-73.
5. Gibson F, Bodenham A. Misplaced central venous catheters: Applied anatomy and practical management. *Br J Anaesth* 2013;110:333-46.

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