

**Fatal airway obstruction
following arterial trauma
during internal jugular
venous cannulation –**

Lessons to be learned

Sir,

I read the article on fatal airway obstruction following arterial trauma during internal jugular venous cannulation by Williams *et al.* with great interest.^[1] While arterial puncture is a known risk in central venous cannulations, I would like to bring to attention several points that were clearly to be highlighted. First of all, as a standard guideline, any elective central venous cannulation should be done under ultrasonic guidance. This is not technically difficult but has tremendously reduced the incidence of inadvertent arterial injury. Use of ultrasound also would point one toward arterial injury in case of doubt, as in this index patient. Color of the blood is not the gold standard to assess the nature of the vessel. Quite often, patients who require central venous cannulations are already unstable and their arterial blood can equally be dark as well to naked eye. When in doubt, one should always check saturations in blood aspirated from the vessel before attempting to dilate to great nature. As is always, if in doubt, dilatation should be barred, as a dilated neck artery would only need a surgical repair and is rare to get control in an elderly patient to stop on its own.

Moreover, assessment of line pressure from the introducer would possibly help in doubtful situations. A simple bedside manometry in intensive care unit setup is not very difficult and can be life saving. And most important of all is the need for surgical cricothyroidotomy. In an emergent situation like this, with no control over airway, I am surprised to see that this is not done as a way of securing airway control and ventilation, rather than attempting to do a tracheostomy with its difficulties in a displaced airway (secondary to an expanding hematoma). Cricothyroidotomy is done at the level where a thyroid cartilage of airway (even when displaced) is felt and a surgical incision opens the airway for a tube to be passed and subsequently to be ventilated. It is always life saving, and can be converted to a proper airway once the situation is brought under control. As reinforced repeatedly, expanding hematoma from an arterial injury in the neck deep to deep fascia needs immediate and quick attention to both airways and the artery itself, as this can further compromise cerebral circulation.

Prathiba Chandershekar

Paediatric Intensive Care Unit, Birmingham Children's Hospital,
Birmingham, UK

Correspondence:

Dr. Prathiba Chandershekar, Flat 4, Tudor Court
34, North Park, Gerrards Cross SL9 8LH, UK
E-mail: prathinaga@gmail.com

Reference

1. Williams A, Mathai AS, Bhatia G, Abraham J. Fatal airway obstruction following arterial trauma during internal jugular venous cannulation. *Indian J Crit Care Med* 2010;14:202-4.

Access this article online	
Quick Response Code: 	Website: www.ijccm.org
	DOI: 10.4103/0972-5229.84894