

INADVERTENT RENT IN THE INTRAVENOUS CANNULA SHEATH AND ITS EXCHANGE USING A SPINAL NEEDLE

Dear Sir,

Vascular access is often technically difficult in children because of the small calibre and impalpability of the veins.⁽¹⁾ At times, we are successful in cannulating a difficult vein, but experience some leak in the cannula which then needs replacement. This problem usually arises because of multiple attempts while cannulating. When withdrawing the metallic stylet to check the backflow of blood and while reinserting the stylet, inadvertent rent/cut in the plastic sheath of the intravenous cannula can occur. If this rent is near the hub of the plastic sheath, the cannula needs to be changed. After withdrawing the cannula, it becomes difficult to cannulate this punctured vein again as the vein may have collapsed. In addition, there will be some collection of blood around the vessel making recannulation difficult. Thus, this becomes a challenging task for the anaesthesiologist.

At other times, reinsertion of the stylet can completely tear the plastic sheath of the cannula, which may get separated from the hub. We experienced this once; however, it was fortunate that the part of plastic sheath was outside the vein and was removed easily. A similar detachment of the catheter from the hub of the venous cannula has been reported before.⁽²⁾

Though guidewires may be used to assist in changing the intravenous cannula, small sizes (e.g. 22G, 24G) may not be readily available everywhere. In our case, we used the easily-available stylet of the spinal needle (after breaking its hub) as a guidewire for changing the cannula. The defective cannula was withdrawn over the stylet, and a fresh cannula was railroaded over the stylet in the same vein. Such a technique facilitates cannulation and eliminates the need to find and cannulate a new vein.

We want to highlight to our readers that renting can occur in the plastic sheath of the intravenous cannula during repeated attempts of venous cannulation. In such a scenario, changing the cannula can easily be done via the stylet of a spinal needle used as a guidewire.

Yours sincerely,

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