EXCHANGE OF INTRAVENOUS CANNULA OVER STYLET OF SPINAL NEEDLE: OUR EXPERIENCE AND COMMENTS

Dear Sir,

I read the recent article by Garg,⁽¹⁾ in which the author described the use of a spinal needle stylet to replace a faulty intravenous cannula. The technique is useful; however, there are some concerns. We have tried the stylet of a 26-G spinal needle for the exchange of a 24-G cannula in ten paediatric patients and have the following observations to make.

The exchange was successful in only one patient. We encountered the following problems with the method. Firstly, in all patients, a haematoma was formed as soon as the preplaced cannula sheath was removed over the stylet of the spinal needle. This happened because of a larger puncture site in the vein, and a relatively smaller sized stylet which was required for the method. Secondly, we encountered some difficulty in railroading the new cannula over the stylet, and the tips of the cannula were deformed in seven patients. In one of the patients, we successfully railroaded the cannula; however, the puncture site in the vein became enlarged during the attempts to railroad the cannula. This was evidenced by a continuing blood leakage from the vein puncture site even after successful cannulation. Thirdly, we observed a false track formation in one patient due to this insertion technique. We could not determine the cause. It could have been due to the stylet of the spinal needle or false track formation while railroading.

Moreover, the chances of introducing infection cannot be ruled out as the technique involves multiple steps and manipulations. The cost of cannulation has increased tremendously since a spinal needle stylet is required.

Yours sincerely,

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1. Garg R. Inadvertent rent in the intravenous cannula sheath and its exchange using a spinal needle. Singapore Med J 2009; 50:845.