

**PHLEBITIS RATE UNACCEPTABLE**

Dear Sir,

We were surprised to see the high phlebitis rate of 26% reported by Nassaji-Zavareh and Ghorbani in your August 2007 issue.<sup>(1)</sup> This becomes even more disturbing when the definition of phlebitis was so rigid, including four of the recognised criteria for phlebitis when most studies include only two. The revised Intravenous Nurses Society Standards of Practice states the incidence of peripheral vein infusion phlebitis should be no more than 5% in any population,<sup>(2)</sup> and recent studies indicate that the phlebitis rate in acute hospital patients is now extremely low.<sup>(3,4)</sup> The authors also indicate that phlebitis is the “most common complication of intravenous catheters”.<sup>(1)</sup> However, we found, as have others, that intravenous infiltration is the most common infiltration-related complication.<sup>(4,5)</sup>

In a recent analysis of data from two trials, which included a total of 2,245 cannulas, the mean length of time peripheral IV cannulas remained *in situ* was 63.05 (range 1–235) hours. In order of frequency, cannulas were removed for: completed IV therapy (34.9%), routine re-site (25.9%), infiltration (22.5%), pain (6%), occluded line (3.4%), erythema (2.4%), accidental removal (2.4%) and phlebitis (1.4%). We also disagree with the statement that “the rate of phlebitis can be reduced .... by: shortening the intervals between catheter replacements”.<sup>(1)</sup> In the above series, we found that the mean time to develop phlebitis was 54.2 hours, well within the recommended three days. We believe that cannulas that are functioning well should be left *in situ*; routine replacement may expose the patient to unnecessary risks associated with breaking the skin’s integrity.

Yours sincerely,

Joan Webster

Sonya Osborne

Royal Brisbane and Women’s Hospital  
Centre for Clinical Nursing  
Herston  
Queensland 4029  
Australia  
Tel: (61) 7 3636 8590  
Fax: (61) 7 3636 1557  
Email: joan\_webster@health.qld.gov.au

**REFERENCES**

1. Nassaji-Zavareh M, Ghorbani R. Peripheral intravenous catheter-related phlebitis and related risk factors. *Singapore Med J* 2007; 48:733-6.
2. Phlebitis: 59. Standards: Infusion-related complications. *J Intraven Nurs* 2000; 23(6 suppl):S56-7.
3. Malach T, Jerassy Z, Rudensky B, et al. Prospective surveillance of phlebitis associated with peripheral intravenous catheters. *Am J Infect Control* 2006; 34:308-12.
4. Webster J, Lloyd S, Hopkins T, Osborne S, Yaxley M. Developing a research base for intravenous peripheral cannula re-sites (DRIP trial). A randomised controlled trial of hospital in-patients. *Int J Nurs Stud* 2007; 44:664-71.
5. Kagel EM, Rayan GM. Intravenous catheter complications in the hand and forearm. *J Trauma* 2004; 56:123-7.