

**Hospital Clinical Guidelines
EVIDENCE TABLE**

GUIDELINE TOPIC: Indwelling subcutaneous catheter (Insuflon) management

Please record all references used in developing the clinical guideline. This form must be filled out electronically and emailed to Jody.Smith@rch.org.au
NB: If you need assistance with completing this table, please contact Jody Smith on x 6956.

Reference (include title, author, journal title, year of publication, volume and issue, pages)	Method	Evidence level (I-V)	Summary of recommendation from this reference (point form)
Dyer, S.L., Collins, C.T., Baghurst, P., Saxon, B. and Meachan, B. (2004) <i>Insuflon Versus Subcutaneous Injection for Cytokine Administration in Children and Adolescents: A Randomized Crossover Study</i> Journal of Pediatric Oncology Nursing, 21 (2), pp 79-86.	Randomised cross over study	111-1	<ul style="list-style-type: none"> • No RCT's evaluating the use of an insuflon in the pediatric oncology population • Small sample - 20 • 75% of patients preferred the use of an insuflon compared to daily subcutaneous injections • Decrease shown in local reaction when using an insuflon • No difference in febrile episodes between use of an insuflon or daily subcutaneous injections • A preference amongst children over 7 years of age for daily injections • Recommends that insuflon devices should be an option for all children receiving cytokines
de Jong, M.E., Carbiere, T. and van den Heuvel-Eibrink, M.M. (2006) <i>The use of an insuflon device for the administration of G-CSF in pediatric cancer patients</i> Support Care in Cancer, 14 (1), pp. 98-100	Retrospective audit	1V	<ul style="list-style-type: none"> • 93 G-CSF periods were registered (29 patients) of which an insuflon device was used in 45 G-CSF periods (21 patients) • 27.5% of patients preferred daily subcutaneous injections. This groups median age was 13 • 2 G-CSF periods by an insuflon device was complicated by mild induration of the insertion site and low-grade fever • Hypothesis that adolescents may be more likely to prefer daily injections reflecting the need for self control and normality • In general, an insuflon device was reported as safe, easy and reliable in the care of children with cancer, improving quality of life especially in younger children

<p>Women's and Children's Hospital, Adelaide (2003) "Paediatric Nursing Clinical Standards – Indwelling Subcutaneous Catheter (Insuflon) Management" Women's and Children's Hospital, Adelaide, South Australia</p>	<p>Clinical Standard</p>	<p>V</p>	<ul style="list-style-type: none"> • Clinical standard from tertiary paediatric hospital concerning the management of an insuflon • Reflective of evidence • Most current references not included
<p>Hanas, SR, Ludvigsson, J. (1994) "Metabolic control is not altered when using indwelling catheters for insulin injections" <i>Diabetes Care</i>. 17(7), p. 716-718</p>	<p>Randomised cross over study</p>	<p>III-1</p>	<ul style="list-style-type: none"> • 16 children with type 1 diabetes mellitus aged 9-20 years of age as participants • No significant difference found between those with or without an insuflon in degree of metabolic control
<p>Rouss, K., Gerber, A., Albisetti, M., Hug, M., Bernet, V. (2007) "Long term subcutaneous morphine administration after surgery in newborns" <i>Journal of Perinatal Medicine</i> 35(1), p. 79-81</p>	<p>Case series</p>	<p>IV</p>	<ul style="list-style-type: none"> • 20 newborns as participants • Morphine administered via insuflon • Side effects monitored • Insuflon viewed as a safe alternative to intravenous morphine administration

Level of Evidence
Clinical Guidelines
Royal Children's Hospital

The Hierarchy of Evidence

The Hierarchy of evidence is based on the National Health and Medical Research Council (2000) and Oxford Centre for Evidence-based Medicine Levels of Evidence (May 2001)

- I** Evidence obtained from a systematic review of all relevant randomised control trials.
- II** Evidence obtained from at least one properly designed randomised control trial.
- III-1** Evidence obtained from well-designed pseudo-randomised controlled trials (alternative allocation or some other method).
- III-2** Evidence obtained from comparative studies (including systematic reviews of such studies) with concurrent controls and allocation not randomised, cohort studies, case control studies, or interrupted time series with a control group.
- III-3** Evidence obtained from comparative studies with historical control, two or more single-arm studies, or interrupted time series without a parallel control group.
- IV** Evidence obtained from case-series, either post-test or pre-test and post test.
- V** Expert opinion without critical appraisal, or based on physiology, bench research, or historically based clinical principles.

Clinical guidelines are based on reviews of the best available evidence. **Level 1 evidence represents the gold standard for intervention studies**; however it is not available for all areas of practice and for some guidelines it may be appropriate to utilise results from studies with lower levels of evidence. Some clinical guidelines may also be informed by experts in the field, locally (RCH) and internationally (Journal articles) (expert opinion) etc. This NHMRC Hierarchy can be used to grade evidence. Please record details on the evidence table and return to Clinical Quality and Safety (CQS) with guideline draft. The Evidence table can be filled out electronically or printed and used as a hard copy.

Please contact Jody Smith Clinical Guideline and Path Coordinator on ext 6956 if you have any concerns or require assistance.