Name of Journal: *World Journal of Clinical Pediatrics*

Manuscript NO: 56318

Manuscript Type: ORIGINAL ARTICLE

Basic Study

Does carrier fluid reduce low flow drug infusion error from syringe size?

Zachary C. Madson, Sitaram Vangala, Grace T. Sund, James A Lin

Abstract

BACKGROUND

Critically ill neonates and pediatric patients commonly require multiple low flow infusions. Volume limitations are imposed by small body habitus and co-morbidities like cardiopulmonary disease, renal failure, or fluid overload. Vascular access is limited by diminutive veins. Maintenance fluids or parenteral nutrition in conjunction with actively titrated infusions such as insulin, fentanyl, prostaglandins, inotropes and vasopressors

139,000 Results Any time

[PDF] Alaris™ Syringe module FAQs - CareFusion
https://www.carefusion.com/documents/faq/IF_Alaris...
Yes. The Alaris **Syringe module** is designed to detect the amount of **fluid** in a **syringe** once it is loaded. The system will not accept a VTBI that is greater than the volume of **fluid** detected in the **syringe**. 21. What are the differences between the BD 1mL and BD 3mL **syringes**?

(PDF) The effect of syringe size on reliability and safety ...
https://www.researchgate.net/publication/24436647...
To determine the effect of **syringe size** on safety and reliability of **low-flow infusions** at rates relevant to hemodynamically unstable infants. : In vitro study using readily available clinical equipment. **Medical-surgical pediatric intensive care unit** of a university-affiliated hospital.

Smart syringe pumps for drug infusion during dental ...
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5586553
A **syringe** pump must be designed in a way that **does** not allow back-**flow** of the **fluid** within the **syringe** or outward **flow** due to the movement of a siphon. Small syringes (10 ml) used for **infusion** in pediatric patients, as well as large syringes (50 ml) used in adults should be amenable to be attached to the pump.
Cited by: 1 **Author:** Kwang-Suk Seo, Kiyoung Lee

Search Tools

Turn off Hover Translation (关闭取词)

Does carrier fluid reduce low flow drug infusion error from syringe s

ALL IMAGES VIDEOS

16,700 Results Any time

(PDF) Syringe size and flow rate affect drug delivery from ...

https://www.researchgate.net/publication/12292665...

To evaluate the effect of **syringe size** and **infusion** rate on **drug** delivery after vertical displacement of **syringe** pumps. Four syringes (10 ml, 20 ml, 30 ml, 50 ml) were studied at three **infusion** ...

Computer Control of Drug Delivery by Continuous ...

https://anesthesiology.pubs.asahq.org/article.aspx?articleid=2091578

Background:: Intravenous **drug infusion** driven by **syringe** pumps may lead to substantial temporal lags in achieving steady-state delivery at target levels when using very **low flow** rates ("microinfusion"). This study evaluated computer algorithms for reducing temporal lags via coordinated control of **drug** and **carrier** flows.. Methods:: Novel computer control algorithms were developed based on ...

Cited by: 9 **Author:** Michael J. Parker, Mark A. Lovich, Amy C…

Publish Year: 2015

Does carrier fluid reduce low flow drug infusion error from syringe s

ALL IMAGES VIDEOS MAPS NEWS SHOPPING

25,900 Results Any time

(PDF) Syringe size and flow rate affect drug delivery from ...

https://www.researchgate.net/publication/12292665...

To evaluate the effect of **syringe size** and **infusion** rate on **drug** delivery after vertical displacement of **syringe** pumps. Four syringes (10 ml, 20 ml, 30 ml, 50 ml) were studied at three **infusion** ...

(PDF) The effect of syringe size on reliability and safety ...

https://www.researchgate.net/publication/24436647...

syringe size on **low flow infusion** reliability and safety. ... National efforts to **reduce medication** errors through standardization of ... context of multi-**infusion** therapy and when interrupting ...

Impact of syringe size on the performance of infusion ...

https://www.researchgate.net/publication/40028745...

To evaluate the impact of **syringe size** on start-up delay and the time to reach 50% and 90% of target **flow** rates, using two commercially available **syringe infusion** pumps at **infusion** rates of < or ...

Computer Control of Drug Delivery by Continuous ...

https://anesthesiology.pubs.asahq.org/article.aspx?articleid=2091578

Background:: Intravenous **drug infusion** driven by **syringe** pumps may lead to substantial temporal lags in achieving steady-state delivery at target levels when using very **low flow** rates ("microinfusion"). This study evaluated computer algorithms for reducing temporal lags via coordinated control of **drug** and **carrier** flows.. Methods:: Novel computer control algorithms were developed based on ...

Cited by: 9 **Author:** Michael J. Parker, Mark A. Lovich, Amy C...

Publish Year: 2015

The Impact of Carrier Flow Rate and Infusion Set Dead ...

https://www.researchgate.net/publication/7952650...

The dynamics of IV **drug** delivery resulting from **drug** infusions connected to main-line crystalloid carriers can be complex and depend on **infusion** set dead-volume, **drug flow** rate, and **carrier flow** rate.

Flow rate, syringe size and architecture are critical to ...

https://www.researchgate.net/publication/6543399_Flow_rate_syringe_size_and...

Clinicians may set **syringe infusion** pumps at very **low flow** rates when treating critically ill children (e.g.,