

Baxa Corporation

PadLock[®] Set Saver and Child Safety

Technical Paper

An overview of the benefits in reducing the potential for sterile cap aspiration when using the PadLock Set Saver.


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Overview

The PadLock Set Saver is the first and only aseptic IV administration set storage solution that can be swabbed and re-used. PadLock was designed to provide a secure seal for the end of an administration set, preventing contamination when the set is not being used for infusion. The Set Saver permanently attaches to an IV administration set, replacing the need for multiple, sterile, single-use caps.



Figure 1. PadLock on administration line

The innovative PadLock device promotes best practice for aseptic IV administration set disconnections from the patient, preventing contamination and securing the IV line in between drug administrations (see figure 1). Effective for multiple uses, the Set Saver eliminates the use of IV administration set caps, a known choking hazard.

The PadLock connection with reducing tip cap danger resulted from an insight at a pediatric focus group. One participant suggested that the PadLock had an additional benefit in pediatric settings of eliminating tip caps and thus any potential aspiration danger. This paper highlights this safety feature and presents some background references

on the issue of patient safety and aspiration hazards.

Background

Baxa Corporation has been involved in preventing accidental syringe tip cap aspiration since the introduction of the Exacta-Med[®] Oral Dispensers and their related accessories in 1975. Oral dispensers or syringes are far safer than hypodermic syringes for administering oral medications, as they cannot be used to inadvertently administer oral medications into an intravenous line.



Figure 2. Oral dispenser with oral tip cap



Figure 3. Hypodermic syringes with tip caps

Oral tip caps, designed only to fit oral syringes, increase patient safety because they are distinctly different products, stay firmly attached, and are larger than hypodermic tip caps.

As a result, Baxa has

accumulated a wealth of experience on the topic of accidental aspiration of tip caps.

Sterile caps, used to close syringes and administration sets, pose a well-known risk to small children – generally when they find a loose cap, put it in their mouth and create an aspiration hazard. These tragic and sometimes fatal events have been documented for more than 15 years in the medical literature.^{1,2} In addition, safety organizations such as the Institute for Safe Medication Practices (ISMP) and the Food and Drug Administration have issued alerts and warned healthcare workers and parents for years of this patient risk.³⁻⁶

Any cap can present issues with accidental aspiration, when used around small children. Most caps look like toy components and children frequently put these and other small, colorful objects in their mouth.

Introducing the PadLock Set Saver

Baxa Corporation has introduced a unique method for storing the open IV administration set connection between intermittent intravenous medication doses. This simple new product is called the PadLock Set Saver. Large enough for easy gripping and access, the Set Saver prevents touch contamination when used as directed. That larger grip surface not only prevents contact with the capping septum, but also makes the device too large to swallow. Its attachment to the IV line also prevents it from being loose and available for oral ingestion.



Figure 4. Closure of PadLock on IV line

The PadLock allows the open administration set to be stored in an aseptic position between doses. There are many benefits to this new system, but highlighted here is that caregivers do not need to find a way to cap the administration set between doses.

Conveniently placed onto the IV tubing (see figure 4), the PadLock replaces other capping alternatives including the use of a standard sterile cap.

For more information on the PadLock Set Saver, see www.baxa.com/padlock.

Selected References

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