

Introducing Magic Jelly, an aid for swallowing medication for pediatric patients

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Administration of medication constitutes a great portion of the day in caring for critically ill children in the Pediatric Intensive Care Unit (PICU).

While parenteral routes are a mainstay in the PICU due to unreliable GI absorption or the inability to swallow, it is highly desirable to enable enteral routes to prevent blood stream infections as well as to improve patient comfort.

In addition, most children will face the challenge of taking often unpalatable multiple and various forms and tastes of medications both while in the PICU and soon after leaving the PICU. There is a very limited choice of drug forms and preparations adapted for the pediatric population.

Such undesirable practices as mixing medication with apple sauce, sweets or food, are not only not effective but can also deprive the child of the joy of eating. Moreover, crushing tablets or decapsulating capsuled drugs may inadvertently result in unreliable or unfavorable pharmacologic action.

Swallowing aid jelly was initially developed nearly 20 years ago in Japan to help elderly people swallow medication and prevent aspiration pneumonia. Dr. Fukui (Ryukakusan, Co. Ltd) modified the original formulation of medication aid jelly for pediatric use and patented it in 1997. It is being used extensively in Japan. Its main constituent is natural agar and does not contain any sugar, gelatin or animal derived substances, or allergenic substances.

It is processed such that it envelops pills but does not dissolve or degenerate them while in the mouth. The jelly makes it easier to swallow pills and helps make a much

smoother and faster passage through the esophagus than water. But the jelly-wrapped medication dissolves immediately once it reaches the stomach, enabling the medication to work as originally intended.

Magic Jelly can be used for infants and children over 6 months of age (in other words, around the initiation of weaning).

It is processed quite differently from confectionary jelly, such that it covers up or balances out bitterness or other unpalatable aspects of medications without interfering with their efficacy.

We have also found it useful in avoiding such problems as clogging or infusion difficulties associated with medication via gastric or gastroduodenal tubes, frequently used in the PICU. Certain medications come in powdered or granulated form and diluting in water frequently causes difficulty in administration or accidental clogging, adding to the nursing work load.

Magic Jelly is a reliable addition to the tools available to health care providers and pediatric patients in the PICU, general wards and home who are faced with difficulty in swallowing or challenged by the need to ingest unpalatable multiple and various forms and tastes of medications.

The basic features of Magic Jelly in pediatrics will be discussed.