

Baby Powder Use in Maternal/Child

The Clinical Services Team has created this document to answer the clinical question related to current practice recommendations around the use of baby powder in maternal/child.

Product

For decades, baby powder has been a standard part of child care, used frequently in the personal care of infants and children. Baby powders traditionally consist of either talcum powder, or more recently cornstarch, kaolin clay, or tapioca starch powders.¹ Regardless of type, substantial evidence exists related to potential dangers posed to children with the use of baby powders.

Arguably, the most well known form of baby powder is talcum powder, which consists of finely ground talc (anhydrous magnesium silicate), a naturally occurring mineral with both absorptive and lubricating properties.^{2,3} Challenges related to the use of talcum powder are multifactorial, stemming from both naturally occurring amounts of asbestos in some types of talc and the overall risk of inhalation or ingestion of the powder. Of note, not all talc contains asbestos and The Cosmetic, Toiletry and Fragrances Association (CTFA) issued guidelines in the 1970s stating that all talc products should be asbestos free due to a known link with certain cancers.⁴ However, in 2019 the FDA alerted consumers to a major recall, as a form of asbestos called chrysotile fibers, was found in a sample of talc baby powder from a major manufacturer.⁵

Case reports as early as the 1960s and 1970s defined the risk of pulmonary injury in children as a direct result of accidental aspiration of talc baby powder substances.^{6,7} Similar case reports are found throughout the literature, reporting significant pulmonary injury and respiratory failure due to accidental aspiration of either talc or cornstarch powders.^{2,8,9} A singular report details toxicosis after ingestion of talcum powder as a result of pica in pregnancy.¹⁰

Clinical Practice Guidelines

The use of talcum powder is not currently recommended by the American Academy of Pediatrics (AAP). The AAP highlights the risk of lung damage if inhaled. Additionally, it notes the potential presence of asbestos in some forms of talc.^{11,12}

Clinical Evidence

Clinical evidence for this topic is mostly more than 10 years old and is primarily limited to case reports describing pulmonary injury due to accidental inhalation of powder substances during diaper changes. The following reports are provided as a sample of the available literature.

- Matina et al. (2011) describes respiratory distress in an 18-month old girl after accidental inhalation of talc powder.²
- Garlich et al. (2011) describes a case of respiratory complications in an 11-month old boy after accidental inhalation of baby powder during a diaper change.³
- Pairaudeau et al. (1991) describes an incident of accidental aspiration of baby powder during a diaper change resulting in severe respiratory complications.⁹

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- Brouillette and Weber (1978) reviewed 25 cases of accidental talcum powder aspiration in children reporting a mortality of 20%. The authors recommended that talcum powder not be used in the routine care of infants and any powder containers be kept out of reach of children.⁷

Summary/Considerations:

Considerations for the use of baby powder include understanding the care and practice for diaper dermatitis. Kahan and Adesman (2019) describe myths and misconceptions around infant care, stating that baby powder is advertised as a necessary preventative care method for diaper rash, despite available evidence describing its risks. For example, Shin (2005) discusses the treatment of diaper dermatitis in infants. The author indicates that talcum powder, boric acid and baking soda should be avoided, noting the danger of aspiration of talcum powder and percutaneous absorption of boric acid and baking soda.¹³ Despite the evidence, an analysis of market reports by Gao and Simpson (2014) indicates that baby powder was a common skin care item for young children. Attention should be given toward the education of caregivers on current and best practices for infants and children.¹

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Initial or Update	Date	Completed by	Changes Made
Initial review	08.2021	FP	Review/formatting
Initial	08.2021	JW	Created