

AAPD issues first evidence-based guideline on silver diamine fluoride use

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The American Academy of Pediatric Dentistry announced Oct. 11 that it issued the first evidence-based guideline on the use of silver diamine fluoride to treat caries in pediatric and special needs patients.

The guideline is based on a systematic review from 1969-2016 and will likely lead to broader adoption of the treatment, according to AAPD.

"Aside from fluoridated water, silver diamine fluoride may be the single greatest innovation in pediatric dental health in the last century," said Dr. James Nickman, AAPD president, in a news release. "Given its minimal cost and easy, painless application, it could help close the gap in health care disparities."

According to the U.S. Centers for Disease Control and Prevention, caries is the most prevalent infectious disease in children in the U.S., affecting more than 40 percent of infants and preschoolers by the time they reach kindergarten, and about half of all children from lower-income families.

Approved by the Food and Drug Administration in 2014 to treat tooth sensitivity in adults, silver diamine fluoride is a minimally invasive, low-cost treatment that dentists paint on the patient's teeth to treat cavities, according to AAPD, adding that the guidelines would increase clarity around its uses and benefits.

The systematic review conducted for the research found no significant adverse effects, according to AAPD. The most notable downside is that silver diamine fluoride turns cavities black. However, current treatment of caries in young children, especially those with special needs, often involves sedation or general anesthesia, both of which have additional health risks for the patient, the AAPD said in a news release.

"Silver diamine fluoride (38 percent solution) gives us another simple and safe option to treat cavities in [the primary teeth of] children who can't cope with getting traditional fillings," said Dr. Yasmi Crystal, clinical associate professor of pediatric dentistry at New York University College of Dentistry. "Prevention is our number one priority, but if a child does have a cavity, we need to treat it before the child develops pain and infection. However, we also want to make sure they have a good experience at the dentist, so this is a good way to do both."