Teething McKenzie Pediatrics 2011

Teething has long been the subject of superstition, speculation, and opinion, but little research. Today we understand much more about the process of tooth development than even just a generation ago, when our parents were raising us. What follows is some facts and fiction about teething, and some helpful information about how to help our infants and children when their teeth are coming in.

How Teeth Develop

Teeth begin developing about 28 days after conception. At around 14 weeks' gestation, calcification of the primary teeth begins, and is almost complete by birth. Calcification of the permanent ("adult") teeth begins between 3 and 12 months of age, and is usually complete by age 3 years.

Calcification appears to be under both genetic and endocrine control; it generally occurs earlier in African-Americans and females. It is nearly always a symmetrical process, occurring on both sides of the mouth simultaneously. Disease processes such as infection, jaundice, and metabolic disorders can damage the teeth, as can some drugs taken by the mother during pregnancy or given to the infant.

The Eruption Of The Teeth

The process by which teeth move through the bone and the gums into the mouth is known as eruption. This process usually begins by age 4 to 6 months, with the first teeth appearing usually between 6 and 12 months. The most common age to see baby's first tooth is about 7 to 8 months. The teeth of premature infants tend to erupt slightly later than the teeth of full-term infants.

Some infants are born with teeth (known as "natal teeth"), but this is uncommon, occurring in 1 in 2000 newborns, and raising concern about genetic syndromes, though it may also be normal. Approximately 1 in 100 children will have their first tooth erupt by 4 months of age, and 1 in 100 children will not get their first tooth until after their first birthday. Doctors and dentists are generally not worried unless the child is 15 months old and still has not had his first tooth erupt.

Occasionally, parents notice fluid-filled cysts directly over the area of an erupting tooth. Known as pre-eruptive cysts, these may appear bluish but are harmless and usually cause no difficulty with teething. Parents sometimes also notice tiny white lumps erupting from the gums, and often mistake these for teeth poking though. Instead, these are small clumps of excess calcium being pushed out ahead of the advancing teeth.

By age 3 years, and possibly as soon as the second birthday, children should have a full set of 20 primary teeth: four incisors, two canines, and four molars in each jaw. The order of tooth eruption is fairly predictable: the lower central incisors ("front teeth") erupt first, followed by the upper central incisors.

The Loss of Primary Teeth

The loss of primary teeth and the eruption of the permanent teeth occurs between 6 and 13 years of age. It is not unusual, however, for a child to lose her first tooth as early as 4 ½ to 5 years of age.

Again, the central lower incisors most often erupt first. Interestingly, unlike infants children rarely complain of pain or other symptoms from the eruption of the permanent teeth.

What Are The Symptoms Of Teething?

Teething can cause increased drooling, but most often drooling is a normal developmental stage of infancy. Around 2 to 3 months of age, the salivary glands of infants begin functioning and contribute to constant drooling, which parents may misinterpret as a manifestation of teething. Moreover, infants of this age begin to put their hands in their mouths, which may again be misinterpreted.

Research shows that most infants do not begin teething until at least 4 to 6 months of age. Fussiness and irritability might be associated with teething, but there are many other possible sources of discomfort in babies. Teething might also cause slight temperature elevations, to as high as 100.4 degrees Farenheit, but higher temperatures almost certainly have another source.

Teething does not cause ear infections. Neither does it cause diarrhea, or diaper rashes. Facial rashes may result from the infant who is often putting their hands or fingers into their mouth, and bringing out and rubbing saliva across their face, but even infants who aren't erupting new teeth do this.

If My Infant Is Fussy And Might Be Teething, What Can I Do?

The first attempts to ease an infant's discomfort should include items that the infant can bite or "teethe" on, such as teething rings, pacifiers, cold spoons, and clean cold washcloths. Cold has an anesthetic effect on mucous membranes and is often recommended to soothe irritated gums.

Topical treatments are available, but often more trouble than they're worth. Topical teething gels (Anbesol, Numzit, Oragel) containing anesthetic agents are available over the counter, but must be used sparingly because of the risk of excess swallowed anesthetic. Many infants also do not enjoy the "taste" of these medications, and may resist their application.

Homeopathic remedies are also available, such as Hyland's Teething Tablets and teething gel. These products are safe, and some parents report that they are effective.

Acetominophen (Tylenol[™]) and ibuprofen (Motrin[™], Advil[™]) are useful for the fussy baby who might be teething if the discomfort is affecting their suck or their sleep. Ibuprofen should not be used in infants less than four months of age.

Final Words

Again, teething might cause mild temperature elevations, but should NOT cause a TRUE fever (defined as ≥100.5 degrees Farenheit). If your infant has had a fever above this temperature for more than 72 hours, or any temperature above 104 degrees, contact your doctor.