

Dental Problems Associated with GHD

What is the relationship of GHD and Dental Development?

Deficiency of growth hormone is a widespread problem, which affects more than just your child's height. Normal levels of growth hormone are necessary for the normal growth and development of your child's teeth and jaws. Routine dental care and timely dental screenings and assessments are important to your child's future dental health.

The lack of growth hormone causes a lag in the growth of bones, which is clearly evident in a child's height. Less evident to most people are the effects of growth hormone deficiency on your child's face and teeth. Growth hormone deficiency commonly causes a lag in the growth of your child's teeth and face bones. It is common in these children to keep their baby (primary) teeth longer (2-5 years usually) than average, so they may be 10- 12 years old before losing any baby teeth. This can cause problems with the eruption (coming into the mouth) of the adult (permanent) teeth. These children are also more likely to be missing adult teeth, which may require braces (orthodontics) and/or bridges (replacement teeth) to correct. If you should suspect these conditions it is best to take your child to your dentist, who can take radiographs (x-rays) of your child's jaws to check on these conditions.

Growth hormone has a strong effect on bone growth, including the bones of the upper and lower jaws. In growth hormone deficiency it is common to see a growth disorder of the jaws. This growth disorder is commonly seen as a small lower jaw or chin since the lower jaw seems to be more dependent than the upper jaw on normal growth hormone levels. There are some treatments that can, in most cases, correct these problems if the jaws are still growing. These treatments commonly involve plastic retainer-like devices ('functional appliances') and/or braces and are usually performed by dentists who specialize in braces (orthodontists) or in children's dentistry (pedodontists). Since the jaws usually begin to grow in response to the growth hormone prescribed by your doctor, this is often the best time for this type of treatment. The dental specialist (orthodontist or pedodontist) treating your child may determine that the jaws are in good relationship to each other and only braces are needed. In this case they may wait to begin braces until most or all of your child's adult teeth are present in the mouth and/or the jaws have reached most of their adult size. If the difference between the jaws is too large for braces alone then surgery may be needed later.

Because of the effects of the growth hormone administered by your doctor on jaw growth, it is important for your treating doctor (endocrinologist) and dentist (orthodontist and/or pedodontist) to have good communication with each other. Although all the effects of growth hormone on the jaws and teeth are not presently known, research is being directed at this problem.

Because the teeth of children with growth hormone deficiency may be softer than normal or not formed normally, they can be very susceptible to cavities. For this reason it is very important to see your dentist or children's dentist (pedodontist) every six months for checkups and teeth cleaning. Fluoride (in toothpaste, mouth rinses and/or tablets) is often very good for these children and plastic placed on the tops of the teeth ('sealants') is frequently indicated. A smile children can be proud of can be a very positive influence in their life as they deal with the other problems of growth hormone deficiency.

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