

# Ectodermal Dysplasia and Oral Health

by

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If I were to paint a pen portrait of a child with Ectodermal Dysplasia it would be something like this - a boy, maybe with thin, wispy hair, not much in the way of eyebrows, a dry looking skin often with dark circles under the eyes and a gappy smile. Whilst the gappy smile is something dentists expect in a toddler and again in the early school years, for the older child it is a cause of social embarrassment. This is particularly in the turbulent years of adolescence but can be an issue, as you know only too well, at the stage when a child first starts school. The lack of teeth is just one aspect for children so affected but there are other oral and dental problems that they may face and we can talk about each in turn.

## **Prevention, prevention, prevention!**

### **(1) Mouth cleaning**

For the child in whom teeth may be missing - either primary (milk teeth, deciduous teeth) or permanent teeth, preventing dental disease in the remainder is vital. In my experience, children with large numbers of missing teeth tend to have clean mouths. Whether that is because there are fewer teeth to clean or whether the gaps make it easier, I am not sure, though parents report that cleaning single teeth is actually quite difficult. Cleaning the mouth and teeth, regularly twice a day, really well, is vital. You need to find a method and brush that suits your child - but your dentist or hygienist will help with this; insist on it!

Generally, the smaller the head on the brush, the easier it is to get to the back of the mouth. For a child who does not want to cooperate with brushing, using a 'Superbrush' can be a help. These brushes have bristles on three sides so that as you move the brush along the teeth, it cleans the top and both sides of the tooth at the same time. A single tufted 'interspace' brush is good to get into small gaps though it needs some help to manage this.

Cleaning is best done after breakfast and certainly before bed. Whilst a child is asleep, there is much less saliva in the mouth. Saliva (spit) has a major protective role, neutralising the effects of harmful acids produced by food left around the mouth.

If that food is not cleaned off before bedtime, the decay cycle can start and go unchecked for hours because there is just less saliva in the mouth at this time.

Cleaning effectively is more important than brushing lots of times in a day; no child has the physical skill to use a toothbrush properly until they are around 6 or 7 years of age.

They need help with brushing - maybe you brushing around all surfaces after they have had a go themselves. Your dentist or hygienist should advise on the best way to keep your child's mouth clean.

## **(2) Toothpaste**

Using the right toothpaste is important too. Children under 6 years generally should use a children's formula toothpaste. After 6 years of age they can use the same toothpaste as the rest of the family, provided they like the taste. Encourage your child to spit out any excess toothpaste but not to rinse out vigorously. That way they get the most benefit from the toothpaste.

## **(3) Extra fluorides**

If the area you live in does not have a fluoridated water supply your dentist may advise you to give your child a daily fluoride supplement. Again, check this with your dentist who will decide the best preventive plan for your child.

## **(4) Dry mouth**

Most children with ED have less saliva in their mouth. This makes their mouth feel dry, food is more difficult to chew and swallow, talking can be more difficult and the child is more likely to develop dental decay. Saliva helps to neutralise acids produced from food and drinks. If you have less of it you are more likely to develop decay with holes that get bigger very quickly. Your dentist will advise on ways around this, which in adults usually involves replacing the saliva that is not there or taking drugs to encourage the remaining saliva glands to produce more. At the same time, it is vital to be really careful about what your child eats, especially sweetened foods and drinks. It is when and how often such things are eaten or drunk that is important. Snacking on and off frequently through the day is the most damaging habit for teeth.

## **(5) Food and drink**

Dentists can be real killjoys when it comes to diet! However, you will also be keen to preserve any teeth that your child has. The cornerstone of successful prevention of dental decay is keeping intakes of sweetened food and drinks to a minimum. Ideally, anything sweet should be taken at a meal and the number of intakes of such foods and drinks limited to 5 per day. Try to keep sweets and chocolate, as well as fizzy and other soft drinks, as treats to be eaten/drunk after a meal or on a 'sweetie day'. Resist the pressure to give in to your child's demands for biscuits and sweets and offer safer foods, encouraging your child to eat fruit and savoury snacks. For drinks, stick with milk, water, sugar-free, well diluted squash, and of course, unsweetened tea and coffee as they get older. Try to keep food and drink clear of bedtime by about one hour since overnight the protective effect of saliva is much less.

## **Dental Care**

### **(1) Advice**

Any baby should be registered with a dentist - even before they have any teeth! This is a crucial time for getting into good dental habits and to put into practice the advice your dentist or hygienist gives you - for example, safe weaning foods, baby drinks, when to start cleaning teeth and with what. If your dentist thinks that fluoride supplements are needed, they should be started roundabout the time that the teeth come through into the mouth. Your local health clinic may have a community dentist working there or will know where the nearest community clinic is if you do not have your own dentist. Sometimes these clinics specialise in children's dentistry.

### **(2) Care Planning**

Ideally all children with ED should be seen by a multi-professional team (often called a Hypodontia Clinic) who have experience of working with children that have missing teeth. The team will usually include a paediatric dentist (somebody specialising in children's dentistry), an orthodontist (someone who monitor's growth and development as well as moving teeth with braces), a restorative dentist (someone who provides fillings, crowns, dentures, bridges and implants), an oral surgeon (a person who removes or uncovers buried teeth, transplants teeth and carries out other surgical procedures) and a nurse coordinator who organises clinics and is available at the end of a phone on a daily basis, for any questions a family may have. It is vital that planning, both short and long-term, is done jointly with all these people who can together decide the most workable plan for you and your child.

### **(3) Treatment**

Children with ED may have fewer teeth than children of the same age and the ones that are present are sometimes pointed and small. This may be the case in the primary (milk, first) and/or permanent teeth. Your dentist will suggest a number of options to overcome some of these problems.

Small, pointed teeth can be made to look like 'proper' teeth by rounding-off with tooth-coloured filling materials and that goes for both primary and permanent teeth. Missing teeth can be replaced, if this is thought to be necessary by both the family and the dentist. For a child with primary teeth only, this is usually best done with removable plastic dentures ('Plate'). Your dentist or a specialist in a community clinic or hospital will make these. Helping a child get used to these dentures is important and often the best person to do this is a family member or friend who already wears dentures and will be an expert on how to cope with false teeth. Most children adapt to these very quickly and often their school friends do not know the teeth are not their own.

For older children, joint planning at a multi-professional clinic including discussion with you and your child, may lead to an offer of orthodontic work followed by dentures (in the short term) and then bridges. When your child has finished growing, implants may be considered.

Waiting lists to be seen by multi-professional teams can be long so it is important that your dentist refers your child to a local team, where one exists, when s/he suspects that your child may have missing teeth. Where there is no multi-professional team much of this dental care will be carried out by an orthodontist working with a restorative dentist in a regional centre.

Alongside all this, your child will need to see your own family dentist in order to have regular preventive care, for example, fluoride treatment and fissure sealants. Extra fluorides, as well as fluoride that your child will be getting from toothpaste, are used if your child is prone to decay. This is usually painted onto the teeth each time your child visits the clinic. The nooks and crannies ('fissures') on the biting surfaces of back teeth are difficult to clean. A toothbrush cannot reach to the bottom of the nooks and crannies and it is there that decay often starts.

Putting a sealant into the fissure (nooks and crannies) prevents germs lodging there and so prevents decay from starting. This is a painless, simple thing that your dentist or hygienist can do.

On a day-to-day basis, your local dentist will often help with minor problems like a sharp edge on a denture and, of course, even when your child is being seen by specialists, they should still visit their family or community dentist for check-ups and preventive care.

All dental care for children in the UK is free until a child is 18 or longer if in full-time education.

This article was first published in our newsletter (Volume 2 Issue 2 - January 2002).