Disclaimer

This movie is an educational resource only and should not be used to manage your dental health. All decisions about the management of premature primary tooth loss must be made in conjunction with your dentist or a licensed health care provider.
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**MULTIMEDIA HEALTH EDUCATION MANUAL**

**Your Practice Online**

**PREMATURE PRIMARY TOOTH LOSS**
Multimedia Health Education

**WWW.YOURPRACTICEONLINE.NET**
INTRODUCTION

Some parents feel that caring for baby teeth is not as important as caring for adult teeth simply because baby teeth fall out any way. Baby teeth are very important because they allow children to chew food and they reserve the spaces for future permanent teeth.

A baby tooth usually stays in place until a permanent tooth underneath pushes it out and takes its place. Unfortunately some children lose a baby tooth too early which can lead to future dental problems. In order to learn more about Premature Primary Tooth Loss, it is necessary to understand normal tooth anatomy.
Normal Tooth Anatomy

The teeth consist of two main parts, the crown and the root.

Crown: The visible part of the tooth projecting above the gums is the crown.

The crown has three layers:

(Refer fig. 1 to 3)

- Enamel
- Dentin
- Pulp

Enamel

It is the hardest outermost part of teeth. It is white in color and is made of calcium hydroxyapatite. The enamel layer is thinner in deciduous teeth, about 1mm.

(Refer fig. 4)

(Continued in next page)
Dentin

It lies below both the enamel and cementum layer of tooth and is softer than enamel which makes it more susceptible to decay. It is yellowish in color.

(Refer fig. 5)

Pulp

It is present at the center of the tooth and is commonly referred to as the ‘nerve’ of the tooth. It is the softer, living inner structure of teeth and is made up of blood vessels and nerves. The pulp chamber is larger in deciduous teeth (baby teeth).

(Refer fig. 6)

Root: The deciduous teeth have longer and more flared roots. It is that part of the tooth that is embedded inside the jawbone. This portion is made up of dentin overlying which a mineralized layer is called cementum.

Cementum contains very small fibers called periodontal ligament fibers which help in anchoring the teeth to the bone. Inside the roots there are small canals through which the main blood vessels and nerves pass to the pulp chamber. These are referred to as root canals.

(Refer fig. 7)
What is Premature Primary Tooth Loss?

Premature primary tooth loss is the loss of baby teeth or primary teeth before the expected time. Although baby teeth will be lost by the age of twelve, they are important for normal development of jaw bones and muscles. The baby teeth save space for the permanent teeth and guide them into the correct position. Baby teeth help children to chew food properly and also are a factor in speech development.

Causes of Premature Primary Tooth Loss:

- **Caries**: If caries (cavities) are not treated timely they can spread deep down into the tooth and weaken it requiring tooth extraction.

- **Gum disease**: This is an infection of the gum tissue causing the tooth to lose its support.

- **Injury / Accidents**: Injury or trauma to the mouth can loosen the teeth and make them fall out.

- **Knocked out tooth**: Here the tooth is fractured or is out of its socket. This occurs in kids involved in sporting activities.

- **Missing Teeth**: Some children are born without primary teeth present.
Consequences of Premature Primary Tooth Loss:

Space created by lost teeth will reduce or even close due to drifting of nearby teeth.

When permanent teeth erupt they may not have enough space. This can cause permanent teeth to come in crooked and become crowded.

Teeth in the opposing jaw may also move up or down to fill the gap.

If back teeth are lost, biting and chewing can become difficult.

If front teeth are lost, the baby’s appearance and speech is affected.

As chewing becomes difficult, it affects your overall health due to poor nutrition.

(Fig. 8)
Diagnosis

Diagnosis of Premature Primary Tooth Loss is made by your dentist on history and visual exam.

Visual Examination: examination of the oral cavity
History: history of any injury or accidents

Treatment

To prevent the problems associated with crooked teeth, space maintainers are used.

What are space maintainers?

Space maintainers are appliances made of metal or plastic that fit in the child’s mouth. The appliance is firmly fixed in the mouth and will be removed when the permanent tooth is in its proper position. Space maintainers hold the empty space left by the lost tooth for the permanent tooth to erupt in the correct position.

There are two types of space maintainers: Fixed and Removable.
Fixed space maintainer: This type of space maintainer is cemented into the child’s mouth and can be of three types:

Band and loop: These are placed on one side of the mouth to hold space open for one tooth. It wraps around the outside of the tooth and is connected to a metal loop that holds the space intact.

Lower lingual holding arch: It is usually bilateral and may be cemented to molar teeth. It is connected by a wire on the inside of the lower front teeth. It is used for more than one missing tooth.

(Refer fig. 11 to 19)
Distal shoe appliance: This type is used for an unerupted first permanent molar tooth; here the metal end is usually inserted into the gum line to keep the open space from closing.

Removable space maintainer: This type of space maintainer uses artificial teeth to fill in the spaces that need to stay open. In children with congenital disease where several teeth are missing, a partial denture can be used.

(Refer fig. 11 to 19)
Precautions with Space Maintainers

Avoid sticky sweets or chewing gum.

Do not push on the space maintainer with fingers or tongue.

Keep the appliance clean by brushing and flossing.

Preventive Measures

Oral hygiene measures

- Begin tooth brushing as soon as your child has teeth.
- Begin flossing when all primary teeth are erupted. These measures help to prevent gum disease and dental decay.
- Night time bottle feeding should be avoided.
- Inspect your child’s teeth regularly.
- Use fluoride tooth paste to prevent tooth decay.
- Dental sealants are preventive filling materials that the dentist applies to the chewing surfaces of the back teeth. This prevents dental decay by not allowing food to get stuck onto the chewing surface.
Disclaimer

Although every effort is made to educate you on Premature Primary Tooth Loss and prevention there will be some things not discussed. Talk to your dentist or pedodontist about any concerns you have about Premature Primary Tooth Loss.