

Coconut to the rescue

HEALTH Coconut water is a great medium to carry a tooth displaced in an accident

One of the most harrowing experiences for a parent is when one's child meets with an accident in school or on the playground. One of the common dental accidents is complete displacement or avulsion of the upper front tooth. This displaced tooth can be repositioned and brought back to normalcy if it is handled carefully and taken to the dentist as early as possible.

Crucial time window

Research has shown that such a tooth has to be taken to a dentist within two hours of the accident. The success of this treatment depends not only on this crucial time window but also on the condition of the cells on the root surface of the displaced tooth. These cells are responsible for the root to get reattached to the bone in the patient's mouth. However, like any living cell, these cells are sensitive to the environment they are in and can easily perish in the absence of nutrients. Hence, dentists recommend that the tooth is placed in a medium that would provide these



USEFUL, AND ACCESSIBLE Coconut water

PHOTO: DEEPTI SHYAMSUNDAR

cells with nutrients till the time it can be repositioned. This medium, referred to as 'transport medium' determines the success or failure of the treatment. Failure would mean that the tooth has to be removed, leading to

both functional and aesthetic issues. The common transport mediums used include the patient's saliva, saline and milk. All these mediums are easily available but do not contain the nutrients needed to sustain the

cells for a long time. An alternative is to place the tooth in the patient's mouth and take it to the dentist. However, this is not possible in young children and in cases where there is bleeding.

According to research, the ideal medium to transport such a tooth is the 'Hank's Balanced Salt Solution', an artificial medium containing the necessary chemicals and nutrients required by the cells. This medium is commercially available abroad and is marketed as "Save a Tooth" medium. However, it is not available easily at the site of the accident.

In India, both the transport medium and immediate dental treatment pose a problem for the common man. What we need is a solution that is effective and also readily available at the site of accident. That was when I looked at the feasibility of employing coconut water as a transport medium. The research was funded by the Meeanakshi University, Chennai, and was carried out by me and my team. The results have been published in two internationally reputed dental journals, including the American Journal of Endodontics. It has

What to do

- Remove the surface contaminants and dirt from the displaced tooth by washing it gently under running water.

- Place the displaced tooth in tender coconut water and take it to a dentist within two hours.

Don't

- Hold the root surface of the tooth; you might damage the cells.

- Place the tooth in a handkerchief or paper as the cells will dry and perish.

been now proved that tender coconut water contains all the necessary nutrients, including minerals, vitamins and amino acids needed to sustain the life of the cells in the tooth till the time of treatment. Coconut water is easily available in our country, and, more importantly, it is a natural transport medium that is sterile and inexpensive. Once the tooth reaches the dentist, the dentist will replace it in its original position and splint it for a week or 10 days before starting restorative treatment.

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