Clinical Application of Enamel

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Introduction

Tooth is the hardest part of the body and enamel is deposited on teeth which is the harder substance and protects tooth from decaying. It is composed of various minerals mainly calcium and phosphorus which makes it harder. Due to the presence of other minerals, tooth become vulnerable as enamel may become damaged or cracked. Enamel protects tooth from feeling pain upon eating hot, cold or sugary substances. Acidic or hard food that can cause damage to the enamel should be avoided. If food gets stuck in between tooth, it can also cause enamel decay.

Enamel also gives color to the teeth as it is the only visible part of tooth. If enamel is damaged teeth may appear yellowish in color as dentin is the second layer which is present underneath the enamel and it is yellow in color. Severity of yellow color depends upon how much enamel is damaged.

Enamel also protects teeth from daily use. Chewing, grinding, biting and crunching may also affect enamel. It also works as insulator as painful chemicals and temperatures also cause sensory feelings to the teeth causing great pain.

Once enamel is damaged, is cant regenerate as it doesn't contain any living cell like all the other human tissues. Teeth may also appear round in shape, and can also become more shiny than usual. Upon progression of erosion, teeth appear to be chipped or edges may become rough and indentations may be observed on the teeth.

Discussion

Teeth are composed of a harder alien accoutrement of enamel, a mid-layer of softer dentin, and a close band of lurid (which contains the assumption and claret accumulation that advance the animation of the tooth). The assorted layers of teeth can be advised altered abstracts and accept altered functions, structures, and properties. In addition, teeth amid in altered positions of the aperture accept altered forms and functions.

In human body enamel is contains maximum minerals, making it thin, hard and translucent layer of calcified tissue. Enamel covers the entire tooth anatomically. Enamel's thickness and hardness may vary on individual tooth and in every person. Color variation is also observed from yellowish color to grey color. This coloration depends upon thickness and quantity of minerals, the quality of minerals and stains on the tooth surface. It has no blood supply or nerves in it. Tooth withstands because of enamel and hardness it provides to the tooth. Enamel hardness is because of its inorganic composition. About 95-98% of inorganic material is calcium and phosphate ions which make strong hydrooxyapatite crystals. These crystals are not pure as strontium, lead, magnesium and fluoride are also present in the composition of enamel. Due to these minerals, hydroxyapatite is more soluble than the pure one (Angmar, B. 1963).

Every teeth of human being is covered with a protective layer called enamel. This layer protects human teeth from damaging. Generally tooth decay is referred when the enamel is destroyed. It is important to know how to take care of enamel and protect teeth from damaging or destroying.

Tooth enamel is the hardest substance of the human body, even harder than bone. it is part of the tooth and can be seen in the mouth. It is found in the shell of each tooth. Even though it is a hard substance but can be decayed when exposed to acid and bacterial build-up (Simmer JP., 2001).

Main purpose of enamel is to protect teeth from damaging. Chewing puts your teeth on risk while eating because food is needed to be grinded. Mostly enamel prevents food to cause any harm to the teeth because of its hardness. Enamel also work as insulator to keep tooth safe from feeling pain. When you feel hot or cold, it's because of the nerves, which senses the temperature but enamel prevent the pain to tooth in general (Robinson C., 1998).

Even though enamel is hard substance but it can crack or even break easily. If food is hard or gets stuck between the teeth, it can cause damage to the enamel and can break it. Once enamel is cracked or broken, it can protect teeth effectively and you may feel pain while eating cold, sugary or hot food. Enamel is a protective layer which doesn't regenerate. If it is broken or damaged, it remains like this for the rest of the life. Enamel is a hard substance but it doesn't possess any living cells (Avery J., 2002).

Once enamel is cracked, the problem gets worse over time. Initially only little tinge is felt and later on it hurts for a while. With the progression of enamel erosion, teeth become more yellowish in color. It happens because enamel contributes to the white appearance of teeth. Dentin, which is present right after enamel and yellow in color, is exposed upon enamel decay. Teeth may also appear round in shape, and can also become more shiny than usual. Upon progression of erosion, teeth appear to be chipped or edges may become rough and indentations may be observed on the teeth (Fincham AG., 1999).

Reference

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