24799388 | email: theweek@apexmedia.co.om | www.theweek.co.om

FLUORIDE AND DENTAL HEALTH

While it prevents loss of minerals from tooth enamel, the damage that dental fluorosis can do is permanent

Fluoride is a compound containing fluorine - a natural element. Using small amounts of fluoride on a regularly basis can help prevent tooth decay. Fluoride prevents loss of minerals from tooth enamel and encourages remineralisation - strengthening areas that are weakened and beginning to develop cavities. Fluoride also affects bacteria that cause cavities by discouraging acid attacks that break down the tooth. The risk of decay is reduced further when fluoride is combined with a healthy diet and good oral hygiene.

Dental fluorosis causes mineralisation disorder of teeth

Sources of fluoride

In places where fluoride is not present naturally in water, it may be added to public water supplies. Research shows that public water fluoridation can lower tooth decay rates by over 50 per cent, which means that fewer children grow up with cavities. Fluoride is also an active ingredient in many dental products such as toothpaste, mouth rinses, gels and varnish.

DR RICHA RAJ

The public drinking water supply in Oman is fluoridated. If you drink water from public water supplies and brush regularly with fluoride toothpaste, then it is sufficient for adults and children with healthy teeth to lower the risk of decay.

Receiving daily dose of fluorides

Children should use toothpaste with fluoride. Brushing twice a day (after breakfast and before bedtime) provides greater benefits than brushing once daily. But parents should dispense toothpaste to prevent their young children from swallowing too much.

In case you are not receiving enough fluoride, your dentist can administer topical fluoride, which is a preventive agent applied to tooth enamel. It comes in a number of different forms. The dentist places gels or foams in trays that are held against the teeth for a few minutes. Fluoride varnish is brushed or painted on the enamel. Varnish is especially useful for young patients and those with special needs who may not tolerate fluoride trays.

Dental fluorosis

Excess fluoride causes dental fluorosis by damaging the enamel-forming cells. Dental fluorosis is an irreversible condition caused by excessive ingestion of fluoride during the tooth forming years. The damage to these cells results in a mineralisation disorder of the teeth, leading to an increase in the porosity of the sub-surface enamel.

Children are more vulnerable to dental fluorosis because their developing teeth are sensitive to higher fluoride levels. They are at greater risk if they swallow or use too much toothpaste and fluoride supplements, or regularly drink water containing excessive fluoride levels. Monitor your child's intake and use of fluoride, and consult with your family dentist on the matter. The damage that dental fluorosis causes to the internal matrix of the teeth is permanent.

Treatment options for fluorosis

The following options are available to treat dental fluorosis depending on the severity.

A. Abrasion - This involves finely sanding off the outer layer of the enamel. It is a common approach when the fluorosis is mild. In more severe cases, it is not recommended since it can make the enamel highly porous that will be prone to tooth brush abrasion.

B. Composite bonding - This involves applying composite resin, a filling with a matching colour, to your teeth which is 'glued' on to the exterior of the tooth.

C. Porcelain veneers/laminates - A veneer is a thin layer of tooth-coloured material that is applied to a tooth for aesthetically restoring localised or generalised defects or discolouration. Veneers offer the best aesthetic solution of all available options.

Dr Richa is a dental surgeon at Pearly White Dental Center, Al Khuwayr. Call 97052624 or email health@apexmedia.co.om for queries

CONFERENCE ON BREAST IMAGING ON SEPT 21

Breast cancer is a growing problem today with one in seven women likely to develop cancer in their lives. As a woman ages, the chances of her getting breast cancer increases. According to Dr Hiral Jerajani Kamath, radiologist and founder of Aafiyaa Imaging and Diagnostic Centre, mammography helps in detecting breast cancer at a very early stage. "It can be detected much before a lump may be felt. Certain microcalcifications are seen on mammograms which are suggestive of early cancer. When cancer is treated early, the treatment is very successful. The patient may not have to lose her breast, and only a part of it is removed. After treatment, the woman can lead a good quality life and the prognosis is good," Dr Hiral said.

Mammography is the gold standard for early detection of breast cancer. No other modality is as sensitive as mammograms.

To contribute to the continued medical education programme of doctors and paramedics in Oman, Aafiyaa Imaging and Diagnostic Centre and the Oman Association of Radiographers, is organising a full day Radiology conference called 'Update in Breast Imaging'. This will be held at the Institute of Health Sciences in Wattayah on September 21.

The conference includes international and local speakers. Yuthar al Rawahi, chairperson of the National Association of Cancer Awareness (NACA), will speak on why breast cancer screening is necessary. Dr S K Ramani, professor of radiology at Tata Memorial Hospital, one of the biggest cancer hospitals in Mumbai, will speak on benign and malignant lesions, BIRADS, calcifications on mammograms, MRI and PET.

Dr Sukhpal Sawhney, senior consultant at Sultan Qaboos University Hospital, will talk on breast ultrasonography. Dr Taha al Lawati, senior consultant surgeon at Royal Hospital, will deliver a talk on treatment of breast cancer in Oman.

The conference hopes to give radiologists and other doctors a complete update on the latest in imaging of breast. Paramedics are also expected to attend the conference, which coincides with the first anniversary of Aafiyaa. A lecture has also been scheduled for September 22 at 9 pm for doctors who are unable to attend the conference. Call 99445624 for registration and details.

Quartz phoneShield now available in Oman

Across the world, the quartz phoneShield and the quartz wi-fiShield have become trusted products to provide defence against the potential harmful effects associated with using a mobile and wireless device. Developed in the UK, the technology used is based on NASA's use of quartz crystals. The shields contain a secret matrix of different natural quartz crystals which 'tune in' to the same frequencies as those used by mobile phones and wi-fi devices. The unique piezoelectric property of the natural quartz reacts in synchrony with oscillating signal bearing radio waves and generates a separate resonance.

These are quick and easy to fit, requiring no wires or batteries and are also long lasting - at least five years, and transferable. The shields can also be used by companies to help promote their brand, as these can be customised and manufactured to depict any company logo and colour. These can be designed to suit company or customer requirements. Many governments across Europe are now acknowledging the risks and advising their citizens to take precautions. In Oman and the Middle East, Younis al Farsi, managing director of Grafik Zone, has secured the distribution rights for the quartz phoneShield and quartz wi-fiShield products.