

FROM THE ARCHIVE

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It sounds like something children would pick up from a joke store to scare their parents with, but a delve into the archive has revealed a number of cases of exploding teeth. Here's a letter to the *BDJ* on 21 September 1965...

Sir, below is the text of a letter from the mother of two of my young patients relating to the 'explosion' of an upper right d| from the seven year-old girl and of the a|a from the five year-old girl.

The circumstances were so unusual and quite unique in my experience that I feel constrained to report this wondering if anyone else has ever come across similar cases. To my knowledge, no textbook mentions such a case and no report of 'exploding teeth' has ever been published in the *Journal* and I shall be most interested to hear from readers who have heard of such an occurrence.

*'These teeth became loose and fell out quite normally and didn't appear to be damaged or cracked when I examined them as soon as they fell out. The double tooth was placed on the mantelpiece which gets warm but not excessively so; several hours later it 'exploded' sending pieces all over the room. I collected as many pieces as I could find but some are still missing. The two single teeth were put on the mantelpiece in a tortoiseshell snuffbox and I didn't realise they were also split until some weeks afterwards.'*

Cyril Tomes, London.

Spooky, and totally unheard of before. Except no more than two weeks later, the *BDJ* received another letter on the same topic. This one appeared on 5 October 1965...

Sir, arising out of Cyril Tomes's letter in the September 21 issue of

## The mysterious case of 'exploding teeth'

the *Journal*, in the *BDJ*, at some point during 1920 and 1925, there appeared a Canadian practitioner's report of an 'exploding' tooth, basically as follows:

A back-woodsman in Canada set out on horseback to visit the nearest dentist – at 100 miles distance – for relief from an aching lower molar. As his journey continued the toothache worsened progressively and considerably until, 'with a sense of explosion within the tooth', the pain suddenly eased.

The patient continued his journey; the dentist discovered that the molar had split longitudinally through crown and roots and he was obliged to remove the pieces.

The suggestion at the time was that the event was occasioned by swelling of the pulp due to raised blood pressure, possibly enhanced by the protracted exercise of horse riding.

I suggest that in the present instance the explosions were of trapped gases (under rising pressure from the heat) within the 'cylinders' of the teeth naturally closed at the masticatory end and closed by blood clots (or derivative) at the root apices.

Though not in quite the same 'category' of explosion may I relate as follows: during early 1918, a Navy commander sought my services for relief from discomfort in (or about) a lower left first permanent molar in a completely normal dental armament.

After prolonged, persistent inspection of the tooth, I diagnosed a longitudinal fracture at right angle to the occlusal plane and probably passing through the line of bifurcation of the roots. On inquiry I learned from the patient that during a boxing bout the previous evening he had 'received a blow on his jaw, not under it, when the tooth seemed to explode.'

Following root treatment, I covered the floor of the pulp chamber with platinum foil, inserted a 17k platinised gold closing staple in the canals as a splint and, subsequently, filled the contrived occlusal cavity (cut as a figure of eight) with a gold inlay.

B. Eady.

The phenomenon caused by exploding teeth even stirred American colleagues to tell us about their experiences, firstly in December 1965...

'Sir, the correspondence regarding exploding teeth reminds me that the late Percy Howe told me that dur-

ing the developmental stages of the ammoniacal silver nitrate treatment of caries, which is associated with his name, he had a number of teeth explode in patients' mouths. He attributed these to explosive reactions between the silver and the ammonia mixtures he was using.

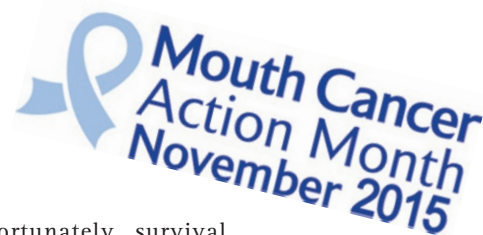
Is it possible that earlier chemical treatments may have contributed to some of the tooth explosions reported in your columns?

Basil. G Bibby, New York.

And then again in February 1966...

Sir, the exploding tooth has had repercussions on this side of the Atlantic, but such explosions are evidently not new. In his book on '*Pathology and Therapeutics of Dentistry: With Miscellaneous Essays on Dental Subjects*' by J. Phelps Hibler D.D.S., published in 1874 in St Louis, the author reported several such cases, one of which occurred in his practice. His speculation as to the cause of the explosion obviously differs from that given by Bibby (*B.D.J.*, December 7, 1965). The following is a quotation from the book:

*'There are certain peculiarities and incidents, which at times accompany odontalgia, in some I think, peculiar constituted individuals, which are sometimes truly amazing. The explosion of a tooth for instance, suffering from odontalgia, which is accomplished through the yet unknown workings of hidden causes in the organism, or induced by, and running simply with the disease. There are a number of such cases on record, both in Europe and in this country, substantiating the facts that such have occurred. One case coming somewhat under my own observation; explosion transpired in the case of a woman, residing at the time in this place, some years since. There was nothing very much different in this woman's constitutional make-*



## YOU CAN CATCH A KILLER

up, so far at least as I could discern, from others of the same race. She said just before the explosion took place, the tooth was aching dreadfully, disturbing the harmonical equanimity of every part of her organism to the extent that she at moments was labouring under slight aberrations of mind.

All of a sudden the raving pains eased up greatly; having been walking the floor for several hours, she sat down a moment or two to take some rest. She averred that she had all her senses unimpaired from the moment aching ceased; all at once without any symptom other than the previous severe aching, the tooth, a right lower first molar, bursted with a concussion and report, that well nigh knocked her over; splitting the tooth directly from the lingual to the buccal surface, and very much shattering the organ otherwise; at the same moment having a horrid sensation traversing the Eustachian tubes, which ended in rendering her quite deaf for a considerable length of time. The whole thing did not occupy but a moment, and the tooth ceased aching at once.

I have thought, if I may be permitted to give an opinion, although it may not be original and very weighty – it might possibly have been caused by an undue accumulation of carbonic acid and hydrogen gases, and together with electrical matter, which possibly has some influence in their actions which are, as well known, of explosive natures, detonate often with a loud noise, being derived from the decomposition of the pulp and other parts consumed by the disease, concentrating in the aching cavity. This theory if it is any account at all, may hold good only in certain temperaments.'

Louis. I. Grossman, University of Pennsylvania, Philadelphia.

So there you have it. Four cases of exploding teeth, all of them remaining a mystery and perhaps more cases that remain unsolved.

Mouth Cancer Action Month (1-30 November) is taking place during November and the UK's leading oral health charity want to ensure that each and every member of the dental team is 'mouthaware'. But what does that mean?

It means being able to recognise the early signs and symptoms of mouth cancer. It means being extra vigilant with potentially high-risk patients. It means educating patients on the risk factors associated with mouth cancer and being vigilant about recognising changes in their mouth.

Organised by the British Dental Health Foundation, Mouth Cancer Action Month aims to save lives through early detection and increase education and knowledge about a disease of which awareness still remains worryingly low.

Mouth cancer is one of the UK's fastest increasing cancers, with cases up by almost 40% in the last decade alone. Dental professionals are on the frontline in the fight against mouth cancer and their support and participation remains instrumental in helping to combat a disease which kills more people every year than testicular and cervical cancer combined.

Unfortunately survival rates for those with mouth cancer have not improved in the last 20 years and it is one of the few cancers which has seen an increase in the past decade. By being 'mouthaware' and spotting mouth cancer early enough, patients are given the best possible chance to be successfully treated and have a good quality of life.

As part of every check-up, dentists are required to carry out a visual examination on their patients for the early signs of mouth cancer. It is important that you know how to carry out an effective examination and also communicate with your patient what you are doing and what you are looking out for.

Chief Executive of the British Dental Health Foundation, Dr Nigel Carter OBE, highlighted the importance of DCPs being 'mouthaware'. Dr Carter said: 'Survival rates from mouth cancer, based on an early diagnosis, are 90% compared to 50% if caught late. This is why it is so important that all dental professionals are aware of the signs, symptoms and contributing factors of mouth cancer and relay them onto patients during the visual examination part of their check-ups. Around 90% of mouth cancers are linked to lifestyle factors and certain risk factors increase chances of developing the disease. These include smoking, alcohol and the human papillomavirus (HPV).

'Through dental professionals recognising these contributing factors in their patients they will be able to identify those most at risk and make them aware of how their lifestyle choices could be putting their health at risk.'

To register your support for the campaign, please visit [www.mouthcancer.org/register](http://www.mouthcancer.org/register).

### Follow these seven simple steps when carrying out a mouth cancer check:

- **Head and neck** - Look at the face and neck. Do both sides look the same? Look for any lumps, bumps or swellings that are only on one side of the face.
- **Neck** - Feel and press along the sides and front of the patient's neck. Can you feel any tenderness or lumps?
- **Lips** - Pull down the lower lip and look inside for any sores or change in colour. Next, use your thumb and forefinger to feel the lip for lumps, bumps or changes in texture. Repeat this on the upper lip.
- **Cheek** - Use your finger to pull out the cheek so that you can see inside. Look for red, white or dark patches. Put your index finger inside the cheek and your thumb on the outside. Gently squeeze and roll the cheek to check for any lumps, tenderness or ulcers. Repeat on the other cheek.
- **Roof of the mouth** - Tilt back the patient's head and open their mouth wide to see if there are any lumps or if there is any change in colour. Run your finger on the roof of the mouth to feel for any lumps.
- **Tongue** - Get your patient to stick out their tongue and look at the surface for any changes in colour or texture. Gently pull out the tongue, holding it with a piece of gauze, and look at one side first, then the other side. Look for any swelling, change in colour or ulcers. Examine the underside of the tongue by asking the patient to place the tip of their tongue on the roof of the mouth.
- **Floor of the mouth** - Look at the floor of the mouth for changes in colour that are different from normal. Gently press your finger along the floor of their mouth and underside of the tongue to feel for any lumps, swellings or ulcers.