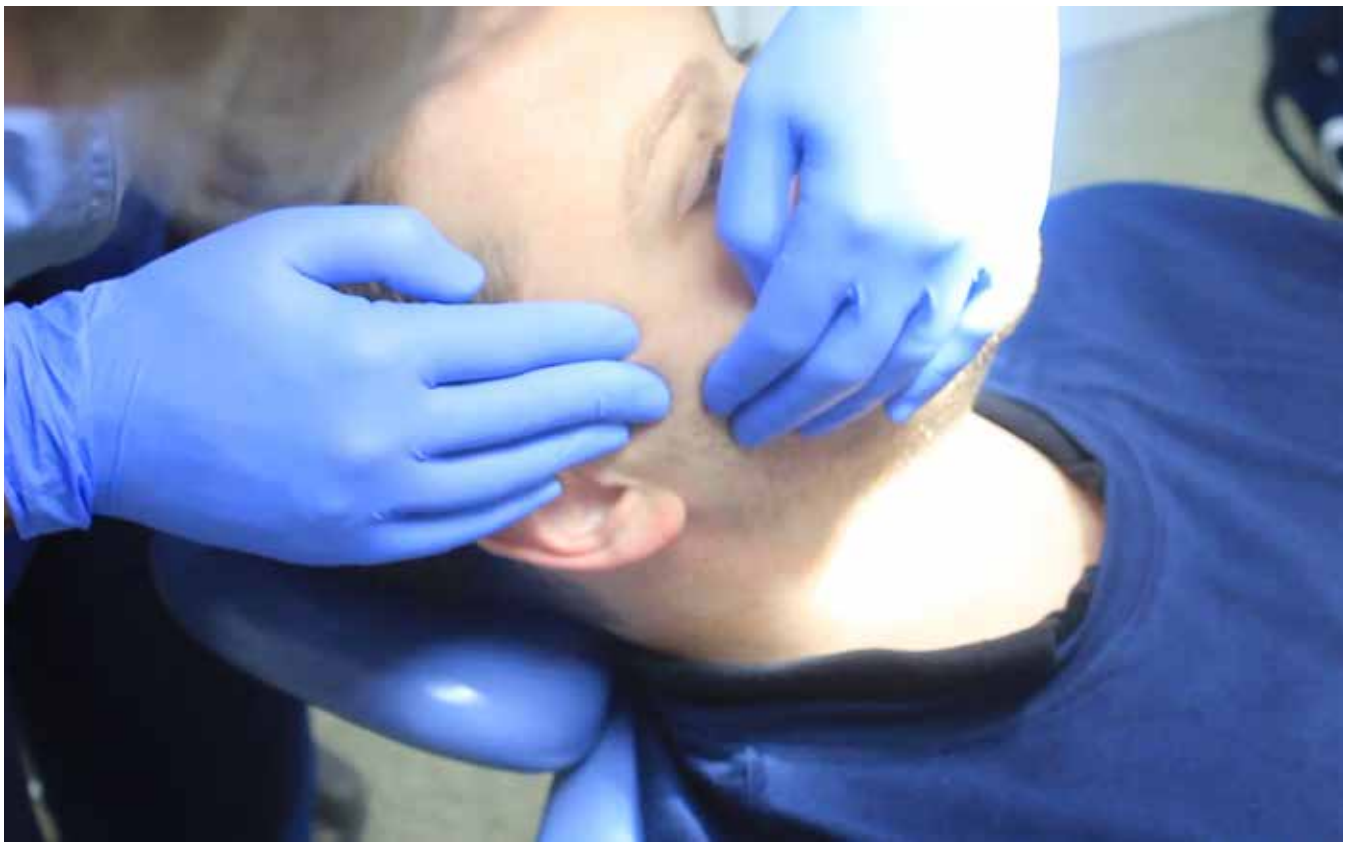
CASTING out mouth cancer: introducing a simple communication tool for the dental team

Dr Chet Trivedy explains how the CAST tool can help practices with early detection, prevention and treatment for mouth cancer.



Dr Chetan Trivedy

Consultant in Emergency Medicine, Senior Lecturer QMUL, Oral Health Foundation Trustee and Founder of Boundaries for Life.

November is Mouth Cancer Action Month (MCAM), another opportunity for the dental profession to highlight the risks and symptoms of this potentially devastating disease.

The deadliest of all of the oral conditions that we may encounter in our clinical practice, a mouth cancer diagnosis can change a life forever. It's a sad fact that this year there will be approximately 7,800 new cases of mouth cancer diagnosed in the UK and an estimated 2,300 deaths annually from this condition[1]. Mouth cancer has increased by nearly 31% in both men and women over the last decade and it represents the 10th most common cancer in men and the 15th most common cancer in women in the UK. Head and neck cancer is the 4th most common

Mouth Cancer Action Month November 2018
Oral Health Foundation

Risk factor	Identification	Intervention	Comments
Tobacco consumption smoking/chewing	Part of clinical history Clinical signs	Smoking cessation and counselling signposting to support clinics.	In 2015 rates of smoking in the UK was 17.2%; a decrease from 20.1% in 2010. The average consumption was 11.3 cigarettes per day which is the lowest rate since 1974[5].
Alcohol consumption	Part of clinical history	Awareness around safe patterns of alcohol consumption (14 units a week for both men and women). Referral for support for those who are identified to have unsafe patterns of drinking.	The rates of alcohol consumption have declined. In 2005, 64.2% of adults surveyed said they drank alcohol as opposed to 56.9% in 2016. Also, since 2005 there has been a 2% increase in those that do not drink any alcohol at all[6].
Betel Nut	Part of clinical history Clinical signs	Chronic chewers at risk of oral submucous fibrosis and oral cancer as well as medical issues such as hypertension and asthma.	Commonly consumed by those from the South East Asian communities.
Human Papilloma Virus (HPV)	Part of clinical history Sexual habits Clinical signs	Leaflets on the role of HPV in oral cancer and awareness around safe sexual practices. Vaccination against HPV may be beneficial in reducing the burden of the disease.	Association with oral cancer: 160% increase in males and 110% in females between 1998-2008[3].
Diet/nutrition	Part of clinical history	Poor nutrition can lead to oral health and general health issues; signposting for better diet.	Diets low in fresh fruit and vegetables have been linked to mouth cancer risk.
Positive family history	Part of clinical history	Greater surveillance and awareness including self-examination.	A positive family history of mouth cancer can increase the risk of developing mouth cancer.

Table 1: The changing risk factors implicated in the development of mouth cancer

cancer in males and the 13th most common in females in the UK[2].

Unique issues

As striking as they are, these figures cannot reveal the additional physical, psychological and financial suffering that a diagnosis of mouth cancer brings, even to those who survive. Clearly many other cancers are equally serious, but there are some unique issues that mouth cancer patients face. Treatment can lead to life-changing facial disfigurement that not only makes simple tasks such as eating, drinking and swallowing difficult, but will also have a major psychological impact as speech is also likely to be affected. Simple things we take for granted such as talking on the phone, communicating and working can all be made that much harder after cancer treatment. The loss of facial structures, including teeth, is often hard to hide.

Mouth cancer can also hit patients financially. This is still the only cancer in the UK where patients have to pay a dentist for a check-up for a potential diagnosis, and although the treatment for the actual cancer is free, any follow-up restorative treatment, such as implants and bridges, has to be paid for. Of course, there are some dental departments at teaching hospitals where this is available for free, but these services are limited and not every patient will have the access to them. It is astonishing to think that, in 2018, patients with mouth cancer are not exempt from NHS dental charges, especially given that treatment such as radiotherapy and surgery will result in long-term oral health complications such as mucositis, periodontal disease, tooth loss and radiation caries, to name a few. This is one of the greatest inequalities faced by mouth cancer patients across the country.

Traditionally, the mantra has been for the dental team to be on their guard for suspicious lesions and patches and refer early. Although an early diagnosis is essential in improving the prognosis and the subsequent life expectancy, as well as the reduction in some of the devastating side effects, this will not reduce the overall number of patients with mouth cancer and even those diagnosed early are at risk of recurrent disease.

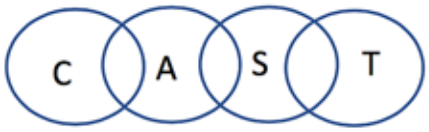
So, by talking about it to their patients, can the dental team help to prevent the cancer in the first place?

The CAST approach to preventing mouth cancer

One approach is to risk stratify patients who may be more prone to developing mouth cancer, either through risk factors or a familial genetic pre-disposition. As members of the dental team, we're used to counselling to prevent gum disease or tooth decay. Advice on diet, brushing and oral hygiene are central to our work, so why should mouth cancer be any different?

C	**COMMUNICATE** about mouth cancer and explain the clinical checks.
A	**ACTION** on any risk factors, triggering interventions to reduce the risks of tobacco (smoking), harmful drinking, HPV exposure (through promoting safe oral sex), stop betel (areca nut) chewing, encourage better nutrition and promote awareness of a positive family history of oral cancer.
S	**SURVEILLANCE** by careful clinical examination in relation to risk factors and promotion of self-examination of the oral cavity.
T	Early **TREATMENT** through a specialist referral if any suspicious lesion is present for over two weeks. If in doubt, get it checked out. _

Table 2: The CAST tool is a simple checklist for the dental team to look at preventing mouth cancer and promoting early detection



This four-step approach may help to identify and prevent cancer in those with high risk factors, or simply act as a structured aide-memoire to discuss mouth cancer with every adult patient.

The CAST tools

C – **COMMUNICATE** openly about mouth cancer

A – **ACTION** on any risk factors

S – **SURVEILLANCE** and monitoring for suspicious lesions

T – Facilitate **TREATMENT** by making early referrals

You may already be using this tool informally, however formalising the practice for all adult patients and recording it in their notes will prompt the dental team to be more aware of those who may be at greater risk, make clinicians more vigilant and enable us all to engage better with patients about mouth cancer.

It will also play an important role in breaking some of the taboos in talking about sensitive issues such as HPV, safe oral sex and problem drinking. While I'm confident that all dentists will diligently look at the soft tissue for potential signs and symptoms of mouth cancer, how many will routinely tell their patients they are specifically checking for signs of mouth cancer every time? How many will follow up the clinical examination with a referral to a smoking cessation clinic? How many will discuss harmful patterns of drinking and refer the patient to their GP? And how many will feel at ease talking about the impact of HPV and safe oral sex with their patients? The CAST tool should provide a framework that will result in some kind of action, or at least greater awareness among the public about mouth cancer.

Communication

Dental professionals receive training on taking a medical history and asking questions about smoking and alcohol. However, the risk factors (see Table 1) are changing, with Human Papilloma virus (HPV) emerging as a growing threat. Nearly 1,500 cases of mouth cancer in 2008 were attributable to HPV compared to just 540 in 1998. This represents an increase of 160% in males and 110% in females.

Given that the transmission of HPV can be through unprotected oral sex, it is a significant risk factor for mouth cancer in young adults. I gave a talk to over 300 people at a recent BDA Conference and not a single hand was raised when I asked how many people felt comfortable having a discussion about HPV and safe oral sex, even though oral sex is practiced by over 70% of the UK population according to a 2012 survey.

The dental team should be prepared to have difficult conversations at every stage of the CAST tool, even though some patients may feel uncomfortable at being asked about matters regarding their health which they perceive as being non-dental. Detailed questions about drinking alcohol or safe sexual practices may be met with either embarrassment or anger. However, healthcare professionals must remove the stigma around these questions and convey to patients that the threats to oral health are changing. The dental team has to evolve to meet and safeguard the needs of their patients' oral health.

Action on risk factors

The traditional advice around alcohol and smoking needs to be replaced

with a more comprehensive message to include the risk factors that are harder to talk about. There also needs to be far greater awareness in younger patients. The dental team can then signpost their patients, with leaflets or online material, to support pathways provided by the NHS through their GP, or through community-based services.

Surveillance

The CAST tool does not advocate any particular recall policy, however for those with a number of risk factors greater scrutiny may be needed during their clinical examination. All adult patients may benefit from being taught how to self-examine their oral soft tissues for any signs of suspicious change.

Treatment and early referral

The final component of the CAST tool is an early referral to a specialist. The dental team is best placed to recognise even subtle changes in the oral mucosa which can be tell-tale signs of mouth cancer or lesions such as leukoplakia or erythroplakia, which can undergo malignant transformation. Any lesion, ulcer or area that is suspicious and present for more than two weeks should be referred to a specialist. Some sources quote three weeks, but given that there is likely to be a two-week delay in getting patients seen by a specialist, lesions present for two weeks, especially in conjunction with risk factors, should be referred. Here again, effective communication skills will come into play.

Using the CAST tool

One of the barriers I envisage in the uptake of this tool is the additional time needed and its impact on remuneration. The second is in the confidence of the dental team in talking about potentially difficult issues. One potential solution is to provide dental nurses, hygienists and therapists with specific communication skills training to empower them to discuss the difficult topics directly with their patients. It could be just a five minute appointment where a trained member of the team can discuss the risk factors and provide the patient with appropriate leaflets.

I am a firm believer that talking to our patients is one of the best weapons we have against mouth cancer as they have great faith and trust in the dental team. By communicating the risks, we can turn early detection into prevention. The CAST tool can also be developed as a package, with training resources as well as clinical and referral pathways to support the dental team.

References

[1]Mouth Cancer Fact sheet **www.dentalhealth.org**

[2]Mouth cancer rates on the rise. **www.cruk.org/cancerstats**

[3]Public Health England. National Cancer Registration and Analysis Service (ncras). Potentially HPV related head and neck cancers

[4]National Survey of Sexual Attitudes and Lifestyles 2, reference tables and summary report. Erens B et al 2003. **Natsal.ac.uk**

[5]Adult smoking habits 2015. Office of National Statistics. **ons.gov.uk**

[6]Alcohol drinking habits in Great Britain: 2005-2016. Office for National Statistics. **ons.gov.uk**

Mouth cancer: get checked out

Gordon Mullen knew something wasn't quite right in his mouth, yet he couldn't put his finger on what it was. Fortunately for him, during a routine check-up, his dentist could.

"I'd had an ulcer on my tongue during the autumn, and the first biopsy came back ok," explains Gordon. "The diagnosis was an allergy. By the end of the following year, it still hadn't gone. I needed to get a crown replaced anyway, so I bit the bullet and went to the dentist. It turned out to be a real lifesaver."

Gordon's recollection of that consultation is as vivid today as it was on the day of the appointment. "It's the kind of thing you just don't forget. What made it worse was I almost knew what was coming. I'd pieced the jigsaw together, I could see it on people's faces.

"The CT-Scan revealed that it was a stage two cancer. As soon as I heard that 'C' word, I thought there was nothing I could do and I was going to die. It was the most frightening experience of my life."

Within weeks, Gordon was operated on at the Freeman Hospital in Newcastle. He described the operation as 'remarkable', and was released four days later. He hadn't heard of mouth cancer prior to his own experience, and was unaware of the risk factors involved. At the tender age of 38 and living a fit and healthy lifestyle, Gordon's experience shows just how important it is to know what you're looking for and act on it.

Gordon went through a six week course of radiotherapy and chemotherapy and has been left with a permanently dry mouth. "I can only eat a combination of soup and soft foods," he explains. "Still, I was one of the lucky ones. Having read so much since then about how important it is to find mouth cancer early, I cannot stress enough to people to go and get checked out. There's no point messing about. Yes, ulcers are quite common, but if they're persistent, as they were in my case, then patients should visit the dentist as soon as possible."

This case study was supplied by the Oral Health Foundation.