## UPFRONT

## SPECIAL FEATURE

## The daily grind

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here seem to be plenty of people still sailing around the world and setting records in spite of the global pandemic and all of its travel restrictions, so that can't be a valid excuse not to visit a giant glacier. Casually cruise past one and you'll hear it. The random, intermittent cracking, almost like muffled thunder if thunder were kind enough to cover its mouth before discharging. That sound is from large slivers of ice snapping off the main body of the glacier and falling into the water, a process known as calving.

Something similar is happening to the enamel in some of you as you're reading this. It may be the aftermath of treating your last patient or it may be gritted teeth as you begrudgingly read something by this author. Either way there is only so much accumulated force your alveolar bone and periodontal ligament can absorb before small prisms of enamel start to flake off. More so at the cervical margins where it's thinner, leaving you a decorative row of so-called abfraction cavities. The masticatory muscles become taut with contraction, summoning every sinew and ligament into their antics. The articular disc, like many a dental nurse, is overworked and underappreciated, pulled in every direction before snapping back at its employer, the TMJ.

The morning wakes you into an ache, and not necessarily from the sight of what's lying next to you. It's perfectly possible that *their* eyelids may lift to reveal a reciprocally deflating sight, stoking the very same nerve endings across their face too. The shared wince at each other belies a deeper pathology than the mere realisation of the night before. You have

difficulty opening your mouth, and not because of any romantic overuse from the previous evening. The alpha waves during your REM sleep were like nocturnal Borrowers, harvesting energy from your unwitting muscles.

Of course, it isn't limited to your face and teeth. Your head doesn't sit in magnificent isolation upon the throne of your body while a crown of tension grips it in a vice. Your spine is already deformed from contorting over the patient to fill that upper wisdom tooth and now the pain from your TMJ permeates down into the trapezius and upper back.

But enough about your day.

We try to manage it with a range of options. A bite guard with full occlusal coverage confers some protection, at least until it acquires a hefty coat of limescale. A Lucia Jig prevents any posterior contact but is more easily swallowed by the dog. Why anybody would feed such a thing to their dog is probably a subject for another article. A Michigan Splint might help, not to be confused with a McChicken Sprint, which is from an entirely different menu and certainly won't help any living thing in any meaningful way.

But all are options where the relief offered is palliative rather than remedial. They won't necessarily stop anyone clenching or grinding, although a mouthful of hardened silicone should frankly improve one's elocution at the very least, a welcome substitute for the marbles they shoved in at my boarding school. Unless we try to address the causes of parafunctional activity, we're simply condemning the patient to the endless prescription of devices that only mitigate the mechanical consequences. How long before that prescription evolves into restorative reconstructions, followed by onlays, crowns and the inevitable pulp deaths?

The main instigator of such involuntary electrical impulses would be the burden of daily life, or at least the mountain of stress borne from it. Parafunctional jaw activity, such as clenching and grinding, may be a learned habit, of course, but it is possibly the commonest symptom of psychological disharmony. Anxiety, insecurity and fear are all ingredients in that stew, simmering into a seemingly inescapable muscular dysfunction.

Part of the conversation with the patient, therefore, could be a tactful discussion about their daily life and ways in which to alleviate that stress, rather than to merely bandage the wounds after the fact. We're not psychiatrists or counsellors, to be sure, but before we became dentists we were human beings, and can thus encourage from a respectful distance the idea of seeking a break or seeking help. There is no shame in doing either and that advice applies to us too. There are many ways of preventing psychological stress and unlearning habits long before you stuff a tray full of alginate into a patient's mouth.

## 'There is only so much accumulated force your periodontal ligament can absorb before small prisms of enamel start to flake off'

If your patient presents with a dentition full of caries, you would surely address the cause by having a serious discussion about their dietary habits and the effects of sugar. Simply filling in the cavities will only encourage more of the same.

If a patient presents with bleeding pockets in their gingivae, you would surely have the discussion about oral hygiene, inflammation and preventing the progression of periodontal disease. If they were a smoker, you might even discuss options for helping them quit.

So, if a patient presents with masseters that a bodybuilder would swoon at then why shouldn't we also try to understand the causes of that, rather than only sending them home with a device that they probably won't use (and will quite possibly feed to their dog)?

We are all very good at treating the symptoms of disease rather than the cause, possibly because it is far easier to do so or because we've become indoctrinated by a treatment-based healthcare philosophy. But a more holistic approach to all aspects of dental care may spare the patient a long and traumatic journey down the restorative spiral, and surely spare their dentist from the torment of travelling with them. Preventative conversations may not be as lucrative as occlusal splints, of course, but they may decelerate the daily grind from pummelling one's life and teeth into scattered pieces.