COMMENT

Letters to the editor

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Diversity and inclusion

Ending racial bias

Sir, I read with interest the Research Insights article entitled 'Ending racial biases in endo'[1] and the accompanying expert view of the article.[2]

Whilst I am not in a position to question the raw data analysed for the research, I cannot help thinking that the author has perhaps drawn an incorrect conclusion due to observer bias.

I recall when I was in an endodontic referral practice in North London, there was a community of Japanese diaspora in the locality and I saw quite a few of them for treatment. It quickly became apparent to me that the pulpal morphology of this cultural group was quite different to the pulpal anatomies described in the standard teaching texts. In particular, I was seeing a high proportion of 'C' shaped molars, which are rare amongst the British population.

This led me to source and read Richard Walker's excellent paper on the pulp morphology of patients in Hong Kong, where he had eloquently described similar variations to my own findings.

Our clinical teaching has been largely based on research within white European populations and North American populations (largely populated from Europe) with the assumption that 'everyone else is the same'. Indeed, this is one of the basic tenets of the researcher's conclusions. To paraphrase: 'If everyone's teeth are the same, then the difference in outcomes between the groups must be because of some form of racial bias'.

I suggest that the correct interpretation of the data is closer to the more nuanced view of the expert view piece. I believe that it is not so much an unconscious racial bias by the involved clinicians, but a lack of knowledge that different races have different anatomies. These variant pulps present a treatment challenge for any dentist and I would not be surprised to find a higher failure rate where anatomies differ from the 'norm'. Even our instruments are designed for the 'standard textbook pulp' morphology.

This means that the best way to address the higher failure rates in the NBME group is to educate clinicians on the likely anatomical variations within various culture populations. I dare to suggest that providing unconscious bias training or encouraging self-reflection would have zero effect on the clinical outcomes.

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Dental research

International collaboration impact

Sir, I read with interest the letter by Tovani-Palone.[1] According to the recent Global Research Report by the Institute for Scientific Information, one-third of globally published articles have authors from different countries. Although international bilateral papers are the most common type of output at present, international trilateral and quadrilateral collaborations are on the rise. As citation counts tend to be greater when international collaboration is higher, it is essential to transform raw citation counts into 'normalised' counts against a relevant global benchmark for proper analysis of citation impact.[2]

The increasing level of international collaboration leads to complex credit attribution for authors. Thus, it becomes challenging to evaluate research productivity and citation impact. The assignment of fractional credit is potentially incorrect when the number of authors on individual publications increases significantly. Keeping these issues in mind, a method called the Collaborative Category Normalised Citation Impact (Collab-CNCI) was developed. It provides a transparent overall citation score by considering different levels of domestic and international authorship collaboration.[3]

This method provides a thorough understanding of a country's research portfolio. It takes into account the article and citation share for each collaboration type and normalises the cumulative citation counts for each paper against articles from the same publication year, subject category, document type, and the same collaboration type. The net CNCI for an author, institution, or country is the average CNCI of their papers.

Citations accrue differently depending on the discipline and document type. Citation counts and counting methods are crucial for performance evaluation at the individual, institutional, and national levels. The fractional and Collab-CNCI methods produce lower index values than the Standard CNCI, but Collab-CNCI provides insight into the role of collaboration in raising the indicator value. Compared to other CNCI indicators, it provides valuable information for decisions regarding research management and policy development. Through Collab-CNCI, research managers and funders can better contextualise relative performance and deconstruct research portfolios to make well-informed financing decisions.[2,3]

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Oral medicine

MRI and trigeminal neuralgia

Sir, in view of the recent published guidelines regarding the management of trigeminal neuralgia by the Royal College of Surgeons of England,[1] we wanted to bring a recent case to your attention.

An adult male attended an oral medicine department with complaints of an intermittent, shooting, unilateral pain radiating along the left maxilla towards the left nose and upper lip. Episodes could last up to five minutes, and he reported many sleepless nights resulting in fatigue throughout the day. Liaison with his GP had resulted in carbamazepine being prescribed which provided some symptom resolution.

After a sustained period of delay, he eventually attended his oral medicine consultation, describing his pain as having now settled. He reported side effects relating to the carbamazepine. No imaging was arranged. Following a further review, pain severity had now intensified. Oxcarbazepine and then gabapentin were both trialled, neither successful with unpleasant side effects reported.

Given the reoccurrence, an MRI brain scan was requested in line with trigeminal protocol.[1] A report revealed a left petrous apex meningioma with mass effect of the left trigeminal nerve cisternal course. His trigeminal neuralgia was diagnosed as being secondary to an intracranial meningioma.[2] Surgical resection of this tumour was recommended by his neurologist, which could result in resolution of his facial symptoms.[3]

Guidelines released by the Royal College of Surgeons of England supports MRI as the imaging modality of choice for screening of trigeminal neuralgia aetiology.[1] Up to 10% of patients presenting with trigeminal neuralgia have a secondary causal pathology such as a brain tumour, multiple sclerosis, or vascular malformations.[1] These can be identified through neuroimaging.[1] The following symptoms, as identified in this case, may indicate intracranial pathology: lack of response to pharmalogical treatments, increase in pain severity over time and continuous interrupted sleep patterns.

Trigeminal neuralgia is often misdiagnosed as migraines, post-herpetic neuralgia, TMD and dental aetiology.[1] This case highlights that even in sustained pain-free episodes, if the patient's history is consistent with trigeminal neuralgia, then there should be a low threshold for requesting imaging. Dental practitioners reviewing patients with confirmed trigeminal neuralgia may wish to confirm whether an MRI of the brain has been performed previously.

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Dental trauma

Kite string-induced facial trauma

Sir, we read the article 'Facial trauma due to e-scooters' by I. Turner and M. Shah.[1] We wanted to address another grievous facial injury caused by kite strings. In northern India, kite flying is common during the winter festival of Lohri. During these festivals, 'kite fighting' is played mainly from rooftops of residential buildings, where people attempt to cut the opponent's kite string with theirs. People have recently employed techniques to strengthen their kite strings (*plastic dor*) by covering them with glass and glue, making the thread extremely sharp to cut other kite strings.[2] The leftover kite strings are seldom removed and become tangled over power lines and buildings, frequently causing severe facial injuries and even fatalities to humans and birds.

Head and neck injuries account for 59%, whereas upper limb injuries account for 29% of all kite string injuries.[3] There have been reports of injuries ranging from laceration injuries to lethal throat lacerations, secondary impact injuries where strings get wrapped around a person's feet, leading to falling, causing fracture of extremities or head injuries, and ocular injuries. The high rate of injuries in the head and neck region is attributed to the region's exposure while riding a two-wheeler, the most common mode of transport in thickly populated residential areas, often without helmets. Injuries sustained by two-wheeler riders are more severe than those sustained by pedestrians, as the injury's severity is determined by the vehicle's speed onto tightly entangled kite strings.

During the Lohri celebration (14 January 2023), our oral and maxillofacial surgery team at Christian Dental College Ludhiana, India, treated ten cases of injuries caused by kite strings. Figure 1 shows kite string-induced facial trauma cases reported at the trauma unit. Although the local government has banned glass-coated kite strings, there needs to be a more effective public awareness campaign about the risks of trauma caused by kite strings to sensitise the general public.[4]

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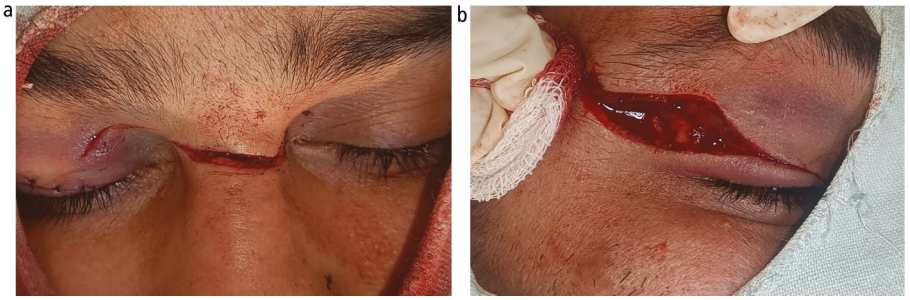

Fig. 1 a, b) Kite string-induced facial lacerations