Summary of: A prospective survey of secondary care tooth wear referrals: demographics, reasons for concern and referral outcomes

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FULL PAPER DETAILS

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Aim To provide a descriptive investigation of general dental practitioners' (GDPs) referrals to Glasgow Dental Hospital and School for management of tooth wear. **Materials and methods** One hundred and twenty-four patient-referrals were reviewed over a 12 month period. A questionnaire was also completed by patients and three reviewing consultants to identify patient demographics, patient perception, consultant's diagnosis and referral outcome. **Results** Overall survey return-rate was 67% of 124 included referrals. Males represented 72% of referrals compared to 28% for females ($p = 0.001$). A significant percentage of patients inhabited the most-deprived areas (59%, $p = 0.002$). Sixty-one percent of patients were aware of their tooth wear within the past five years. Aesthetics was the primary concern for 54% of patients ($p = 0.001$). Attrition was the main aetiology of tooth wear in 51% of referrals ($p = 0.001$). Ninety-two percent of patients ($n = 76/83$) did not require specialist treatment and were consequently returned to their GDP, referred for hypnotherapy or reviewed later. **Conclusion** There was a significant association between social deprivation and tooth wear in GDP referrals to a secondary care dental facility. Males aware of their tooth wear for the preceding five years, presenting with appearance as their main complaint and displaying evidence of attrition were more likely to be referred by GDPs for specialist management or advice.

EDITOR'S SUMMARY

I know that I have often written in these summaries about the fascination of the complexity that studying dentistry can bring and how multifaceted it can be. I suppose that in this instance use of the adjective 'multifaceted' in relation to tooth wear might seem like a play on words. However, I use it in the widest sense since this research throws up a variety of questions in association with aetiology, pathology, psychology, patient demographics, oral healthcare provision and treatment options – to name but a few.

There is no doubt that as the population keeps more of its teeth for longer tooth wear will be a problem of increasing frequency for us to try and solve in our patients. This research is therefore timely in attempting not only to quantify the extent but also to try and define some of the parameters surrounding possible future care pathways and patterns.

Although the payment system in Scotland is still essentially a fee per item of service arrangement it is clearly not

inspiring primary care for this clinical entity, other than by re-referral back to the original GDP for secondary care prescribed treatment. This could be significant in future since one of the main features of detection or diagnosis is careful and detailed examination, which takes time and which in turn is expensive. Whilst care should not be provided solely on the basis of ability to pay, the other potential confounding factor here is that the majority of patients referred were male and from the most deprived areas of Glasgow. Is this a patient group that will be prepared or able to afford detailed restorative and cosmetic care? Since many of them presented with appearance as their main concern it may be, but the likelihood seems slim. There is a complex set of factors at play here and the answers are neither obvious or straightforward. The authors hope to follow this up with some work on inter/intra-clinician agreement and this too might provide some interesting ways forward.

The full paper can be accessed from the *BDJ* website (www.bdj.co.uk), under 'Research' in the table of contents for Volume 216 issue 5.

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IN BRIEF

- Investigates tooth wear referrals to secondary care.
- Provides insight into patients' perception of their tooth wear condition, their main concerns and expectations.
- Demonstrates an association between tooth wear and socioeconomic deprivation in patients.

COMMENTARY

This survey confirms the significant number of tooth wear referrals made by GDPs to secondary care. Of particular note was the greater proportion of young to middle-aged males from deprived areas diagnosed with attrition. Erosion has dominated much research within tooth wear at the expense of attrition, which is still a major problem. It is interesting to speculate on whether there are demographic differences across the UK in the prevalence of erosion and attrition as risk factors for tooth wear. Socio-economic determinants of ill-health such as stress and diet are probably linked to wear. The main message was that over 90% of the referred cases were deemed not to require specialist intervention or management. This begs the question why are droves of tooth wear cases referred to secondary care? In England the discredited UDA payment system may be a disincentive to restore multiple worn teeth. In Scotland, however, UDA does not apply as it is still essentially a fee per item service. Perhaps undergraduate education and training does not equip young dentists with the competence to tackle these cases and dentists qualified over 20 years may not have been taught how to manage wear whilst students. This paper highlighted that postgraduate education/CPD is important to address any gaps in knowledge. Referred tooth wear patients, usually males, often present with advanced wear despite our understanding it is a slow process. This survey also raises the value of recording and monitoring wear and GDPs should use casts, silicone putty matrices and/or appropriate indices sooner rather than later. A worn dentition will become common place

with an increasingly older dentate population. GDPs need to equip themselves with the necessary skills to diagnose, monitor and restore.

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AUTHOR QUESTIONS AND ANSWERS**1. Why did you undertake this research?**

Tooth wear is a dental condition that affects a significant cohort of the population. Currently, there is lack of an evidence-based consensus regarding the condition's diagnosis, risk factors, patient needs and expectations, management choices, and means for monitoring progression rates. The aim of this prospective survey was to provide a descriptive investigation of the patient cohort referred by general dental practitioners (GDPs) within Scotland to a secondary care setting for management of tooth wear and identify outcomes of the patient referral pathway. This survey would assist in identifying associations between certain patient factors, such as socioeconomic status, gender, age, aetiology of tooth wear, treatment needs, and their referral to secondary care. The survey also aimed to identify if the various patient factors can be considered as tooth wear risk factors that can aid clinicians in further understanding, diagnosing, managing, and consequently addressing patients' expectations and needs.

2. What would you like to do next in this area to follow on from this work?

The choice and standardisation of tooth wear management modalities amongst clinicians does require further research. A potential future study could investigate the inter/intra-clinician-agreement, involving clinicians based at primary and secondary care settings, regarding choice of tooth wear management modalities when presented with standardised tooth wear clinical scenarios. The investigation would aim to identify the presence or lack of agreement in tooth wear treatment planning between clinicians and recognise any significant associations between clinical settings and tooth wear management choices.