

Removal of mandibular third molars: Sweden v. Wales

Comparison of decisions regarding prophylactic removal of mandibular third molars in Sweden and Wales
by K. Knutsson, L. Lysell, M. Rohlin, M. Brickley, and J. P. Shepherd *Br Dent J* 2001; 190: 198-202

Objective

To test the hypothesis that Swedish dentists schedule more mandibular third molars for prophylactic removal compared with UK dentists and oral surgeons.

Design

Clinical and radiographic information relating to a stratified sample of 36 disease-free mandibular third molars (equal distribution of males and females, patients' age, angular position and degree of impaction) was presented to 26 general dental practitioners (GDPs) and 10 oral surgeons in Sweden and 18 GDPs and 10 oral surgeons in Wales who were asked to decide whether or not the third molars should be removed.

Results

There was no evidence of any difference in mean number of molars scheduled for removal by the GDPs, but the Swedish oral surgeons scheduled significantly more third molars for removal than oral surgeons in Wales.

Conclusion

The less interventionist approach among oral surgeons in the UK

may reflect the development and application of authoritative guidelines in the UK and an extensive debate concerning appropriateness of prophylactic removal there.

In Brief

- Judgement analysis can be used to explain regional variations in clinician's treatment strategies
- Research on clinical decision making frequently give evidence of wide inter-individual variation among clinicians
- General dental practitioners are as competent as oral surgeons in their ability to choose appropriate third molar treatment options
- Non-clinical factors influence clinical decisions. Such factors are: access to surgical services, patient's costs for treatment, cultural and professional traditions
- An ongoing debate, influential opinion leaders and clinical guidelines could change the clinician's behaviour

Comment

The appropriateness of prophylactic removal of mandibular third molar teeth continues to be a topic of debate in the UK. Guidelines have been available in recent years including the NIH consensus criteria, the Royal College of Surgeons guidelines and more recently the NICE guidelines, the middle of which are referred to in this publication. It may be assumed therefore that most practitioners in the UK would be influenced by these documents, whereas no such guidelines are available to practitioners in Sweden. In addition, they may be aimed primarily at oral surgeons rather than at general practitioners. Many of the third molar procedures in the UK are carried out under general anaesthesia. In Sweden 98% are performed under local anaesthesia.

Factors which may influence clinicians on whether to remove third molars can include available resources, patient's preferences, method of reimbursement, the influence of oral healthcare and the existence and application of clinical guidelines. This study suggests that practitioners decisions on whether to remove third molar teeth are achieved early in their career and influenced little by continuing education in the provision of such surgical treatment.

This study hypothesised that more prophylactic removal of mandibular third molars occurred in Sweden than in Wales, and that general practitioners would be less likely to consider removal of third molar teeth. Thirty-six disease-free mandibular third molars were chosen for assessment. The practitioners received clinical/radiographic information on which to base their assessment. One might question that if all 36 molars were disease free then their removal would be deemed prophylactic. The oral surgeons in Wales were all accredited specialists, whether this was the case in Sweden was unclear.

The significant findings were that Swedish oral surgeons removed more third molars than Welsh oral surgeons. The number of molars scheduled for prophylactic removal varied widely in both countries and there was wide variation in the number of molars scheduled for removal within each group of dentists. However, there was no difference in the mean number of molars allocated for removal between the general practitioners practising in the two countries.

Oral surgeons in Wales adhered to current opinion and evidence in the literature on prophylactic third molar removal.

They were more non-interventionist compared with oral surgeons in other countries and GDPs in Wales. This may relate to the intensive debate on the role of prophylactic removal, more readily available for oral surgeons in the UK, more support within the oral surgery community for non-interventionist approach and that RCS recommendations for appropriate evidence-based treatment are aimed at oral surgeons.

This study suggests that there was a wide variation in individual dentists' decisions regarding prophylactic removal. This may suggest that they are not applying the criteria consistently and a series of reasons are suggested. It concludes that the decision to remove mandibular third molars is related more to individual clinician factors rather than the category of practitioner or where they practise. The suggestion is that general dental practitioners are as competent as oral surgeons, in both countries, in their ability to choose appropriate treatment options for mandibular third molar teeth.

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