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Training in surgery of the temporomandibular joint: perceptions of trainees in oral and maxillofacial surgery in the United Kingdom

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Abstract

Surgery of the temporomandibular joint (TMJ) is emerging as a subspecialty in its own right within Oral and Maxillofacial Surgery (OMFS). Recent guidelines on training and practice within this area have laid down standards of competence in certain procedures, and asked for evidence of "exposure" to others at the point of completion of higher training in OMFS. Provision of surgery of the TMJ is becoming more centralised within tertiary referral centres, with resulting disparity in opportunities for clinical experience in different training regions. We sought to gain a national perspective about this, and establish whether all trainees are truly equal when it comes to exposure to surgery of the TMJ during higher surgical training. An electronic survey was distributed to all members of an online Yahoo! group forum reserved for specialty trainees in OMFS. From those surveyed, 25 (48%) stated they had no experience of arthroscopy, while 19 (37%) and 38 (75%) reported no exposure to operations for alloplastic and autogenous replacement of the TMJ, respectively. A mode score of 1 out of 5 (44%, n = 22) was returned when they were asked to rate the likelihood of considering TMJ surgery as a subspecialty. The current survey highlights variable exposure to operating on the TMJ across geographical divides within the UK, and little interest among trainees in pursuing the subspecialty as a career.

Keywords: temporomandibular joint (TMJ) surgery; surgical training

Introduction

The recent BAOMS/RCS Commissioning Guide for temporomandibular joint (TMJ) disorders specified that few patients with such conditions should require onward referral to a tertiary centre, with most being managed locally.[1]

Current expectations are that patients "should be able to expect a high quality service from an appropriately trained surgeon" and that for most this should be available in the local Oral and Maxillofacial Surgery (OMFS) service. This is reflected in the recent minimum numbers required for trainees in OMFS published online by the Joint Committee on Surgical Training (JCST), which require competence in either arthrocentesis or arthroscopy (a minimum of 10 procedures done before certification–no distinction is made between the two procedures for the purposes of numbers recorded by the JCST) and experience of TMJ replacement (a minimum of 4 procedures at certification). [2]

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There are concerns about whether all trainees around the UK have equal competence in operations on the TMJ. In a survey by Thomas and Mathews, [3] only 42 of the 215 OMFS surgeons who replied (20%) used arthroscopy in their clinical practice. They stated that up to 14 of the practising consultants (34%) did between one and five arthroscopies during the year 2009-2010, and only eight (19%) had done more than 20 during the same period. Similarly, a review by Speculand [4] estimated that there were 60-65 TMJ replacements done nationally in the UK during 2007, with only four units doing 10 or more cases/year (Birmingham, Bradford, London, and Nottingham).

We sought to gain a national perspective on this issue from trainees themselves, and see whether they are all truly equal when it comes to contact with surgery of the TMJ during their training.

Methods

A prospective audit was undertaken of all OMFS trainees in the United Kingdom using the electronic survey tool SurveyMonkey®. The survey was distributed to all members of an online Yahoo groups forum reserved for specialty trainees in OMFS (trainees in higher surgical training in the specialty who hold a National Training Number). They were asked about frequency and nature of exposure to procedures on the TMJ, anticipated confidence at completion of specialty training (CCST), and likelihood of pursuing TMJ surgery as a sub-specialty after training. Respondents were also asked to give their current level of training and region. Free text comments were invited at the end of the survey and no questions were compulsory.

Results

A total of 52 trainees responded to the survey from 134 members of the Yahoo groups OMFS trainees forum (a response rate of 39%), and a wide range of training grades and UK training regions were accounted for by the respondents (Figs. 1 and 2). The number of cases that respondents were exposed to each year is shown in Table 1. From those responses, while 39 trainees (75%) took part in more than five arthrocenteses of the TMJ, only 11 (21%) had experience of a similar number of arthroscopies of the TMJ and 11 (22%) an equivalent number of alloplastic TMJ replacements. Those respondents who were involved in more than five alloplastic joint replacements were from a diverse range of training regions (Severn, Oxford, West Midlands, Kent Surrey and Sussex, Thames Valley, Mersey, West Midlands, and Scotland).

As expected, the nature of involvement became more observational as procedures become more complex (Table 2). Of the total number of potential respondents, 34 (65%) had been involved with an arthrocentesis in some capacity (either supervised or independently), while only 11 (21%) had done an alloplastic TMJ replacement. Again, these respondents hailed from a number of training regions (East Midlands, London, Mersey, Oxford, Severn, West Midlands, and Scotland).

Respondents were asked how confident they were that they would be competent in different surgical procedures on the TMJ at the time of completion of specialist training, and asked to rate this on a 5-point Likert scale (Table 3). As can be seen, the scores were higher for simpler procedures such as arthrocentesis and intramuscular Botox® injections, but low for alloplastic and autogenous TMJ replacements.

Finally, participants were asked to rate how likely they would be to consider TMJ surgery as a subspecialty interest in their future careers (Table 4). The mode score returned on a 5-point Likert scale was 1 (signifying not at all likely), and 22 (44%) of respondents returned this result. In free text responses trainees complained that there was "very variable experience in different units around the rotation" and "minimal exposure," with some respondents reporting that they had "no trainers with TMJ subspecialty interest" in their region.

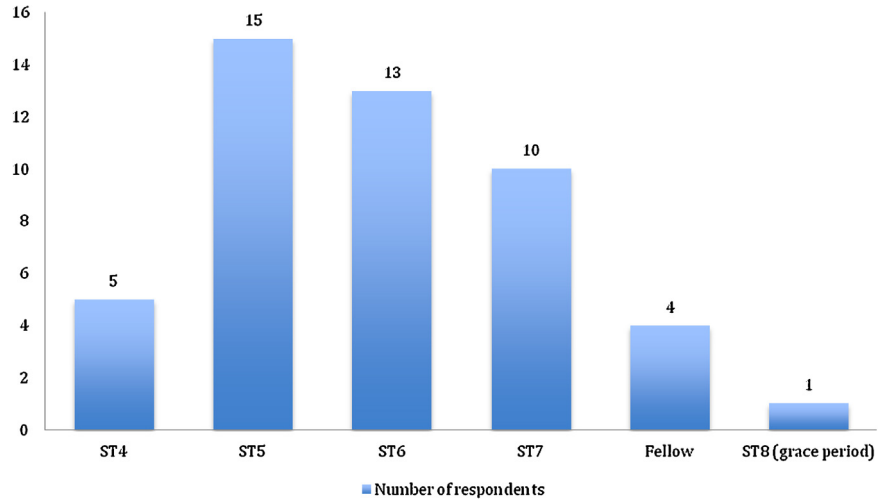

Fig. 1. Breakdown of respondents by training grade; the remaining respondents declined to state their training grade.

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