Tertiary voice clinics are crucial to a comprehensive ENT service: 3 cycle audit over a 14 year period (2003-2017)

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Background

More than 5 million workers are affected routinely by voice impairments costing the economy an estimated £200m/year (Carding, 2007). Voice patients are usually referred to secondary ENT clinic where there is a single professional, limited appointment time, FNE assessment and there may be other ENT problems/imperative to exclude cancer. In a tertiary voice clinic there are longer appointment times, collection of data (VHI/GRBAS/RFS/RSI), multi-disciplinary input, gold standard videolaryngostroboscopic assessment but this makes these clinics more expensive. Can we justify added expense in limited resource setting?

Objectives: 3rd cycle audit

- Who is referring into the voice clinic from secondary care?
- Does attendance at voice clinic changed referring diagnosis?
- Has referral accuracy and rate changed over time?
- Does seniority of referrer affect whether diagnoses are confirmed / changed / refined/ made?
- Which pathologies are most commonly misdiagnosed in secondary clinics?

Methods : 3rd cycle audit

34 month period (28/11/2014 – 18/09/2017)
New referrals to Voice clinic
From secondary clinics
Retrospective analysis of prospectively collected voice clinic database on shared drive
Cross-referenced with clinic letters when needed
Looked at referring diagnosis, seniority of referrer and subsequent diagnosis in voice clinic
Compared with results from previous audit cycles (1st 2003-4, 2nd 2009-11)

Results

There were 971 new referrals to voice clinic in the audit period, 336 of these referrals were from secondary ENT, head and neck and maxillo-facial clinics. This was an increase from only 7-10% of referrals coming from these clinics in 2009-2011, to 34.6% in this audit period. The female to male ratio was 2:1. Ages ranged from 16-90 years (mean 49.5). Most frequent occupations were office worker (19%), lecturer/teacher/teaching assistant (10%) and singers (7%) and retired (38%). 15% of patients were current smokers, 24% ex-smokers, and 1% using e-cigarettes. 60% of patients consumed alcohol, and 13% had had prior laryngeal surgery before referral to our clinic.

The most common diagnosis to be confirmed in voice clinic was vocal cord paralysis. Nodules were frequently over-diagnosed in secondary care, whilst cysts, LPR and Muscle tension dysphonia (MTD) were diagnoses commonly made in voice clinic. Where diagnoses were refined, LPR and MTD were the most common additions to the existing diagnosis.

Results

58% of secondary care referrals came from secondary ENT clinics with consultants being most likely to refer. Attendance at the specialist voice clinic resulted in the diagnosis being made, changed or refined in 70% of cases. This was similar to the previous audit cycles (73% in 2009-11), and more than in 2003-4 (55%) (Table 1). Seniority of referrer influenced the likelihood of diagnoses being confirmed or changed, with consultants more likely than registrars to have their diagnoses confirmed (although 65% of their referring diagnoses were required revision overall) (Table 2).

Discussion

The voice clinic provides added benefit, with diagnoses being changed, refined or made in 70% of cases. We hypothesise this is due to the increased time pressures in secondary care clinics, their emphasis on excluding cancer, and their relatively poor visualisation of subtle laryngeal lesions with standard nasendoscope compared with gold standard video-laryno-stroboscopy. In addition, UK ENT training concentrates on structural changes associated with disease, rather than laryngeal function disorders, such that the latter may not be recognised or attended to by the busy clinician.

The presence of a multidisciplinary team in the voice clinic is greatly beneficial in correctly diagnosing these patients so their treatment pathway can be streamlined and psychological morbidity and compensatory changes associated with developing a voice disorder become less ingrained. An ideal referral system would select those patients with more complex voice problems, or those more dependent on their voice, for the voice clinic – our audit has not proved that this occurs, but does suggest that complexities of voice pathology are being recognised and acted upon in the voice clinic.