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Our experience of a Speech and Language Therapist led Swallow Disorder Clinic

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Abstract

Introduction:

Dysphagia can lead to morbidity including weight loss and aspiration pneumonia. Effective triage of patients and streamlining of pathways to expedite diagnosis and treatment is therefore imperative.

Objectives

To measure the referral to treatment time (RTT) for dysphagia patients in a newly established pathway and compare with existing UK national and local RTTs.

To evaluate patient feedback.

Methods

Speech and Language Therapy (SLT) Advanced Clinical Practitioners (ACPs) were trained in nasendoscopy and assessment of swallow. RTTs were measured and patient satisfaction questionnaires completed.

Results

We demonstrate a decrease in triage to treatment time (from 24 to 6 weeks)

Patients reported high understanding of the condition and minimal discomfort during assessments.

Radiation exposure was reduced (2% of patients undergoing soluble contrast swallows, previously 100%).

Conclusion

The new pathway expedites treatment and achieves high patient satisfaction. It empowers SLTs in efficiently managing low-complexity cases and supports multidisciplinary care for dysphagia patients.

MeSH Keywords

Deglutition, Deglutition Disorders, Triage, Referral and Consultation, Surveys and Questionnaires, Patient Outcome Assessment, State Medicine, Allied Health Personnel, Waiting Lists, Scope of Practice

Introduction

In March 2022 there were nearly 498,517 patients on the waiting list for Ear Nose and Throat (ENT) treatment to begin in the UK. Of these patients who have been referred but have not yet completed their treatment, 55% have been waiting for less than 18 weeks, and the average waiting time of those on the list is 15.8 weeks [1]. The COVID-19 pandemic certainly contributed to the backlog of treatment, however since April 2016, the number of people joining the waiting list (referrals) has been higher than the number of people leaving it (treatment) in every month except one.

In order to reduce the length of a waiting list, it is important to find new ways of treating patients more quickly. A review of non-urgent patients referred to ENT in East Sussex Healthcare NHS Trust with swallowing difficulties in 2015 (n=68) showed they waited 24 weeks from start of referral to end of pathway including any investigations. All of these patients were referred for a barium swallow.

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Methods:

A collaborative approach to pathway design, patient selection and measurement of effectiveness was undertaken. Speech and language therapy Advanced Clinical Practitioners (ACPs) were trained and initially supervised by an ENT Consultant in performing nasendoscopy. A clinical protocol was developed in which an ENT consultant would triage referrals directly into the swallow disorder clinic. This was run in parallel to an ENT Consultant clinic to enable supervision as required, review images, organise radiological requests and support in complex treatment planning decisions.

A pre-clinic questionnaire was utilised to gather pertinent clinical information. On presentation, a detailed history of dysphagia related symptoms was recorded, comprehensive oromotor examination performed followed by Fibreoptic Endoscopic Evaluation of Swallowing (FEES). This involved direct visualisation of functional swallow with a range of fluid and diet textures. Analysis of the swallow and diagnosis was completed and shared with the patient within the clinic, with visual biofeedback to support their understanding of their swallow function and any recommendations advised. Following the appointment, patient feedback was gathered via questionnaire.

The questionnaire collected after the FEES asked patients to rate discomfort levels during FEES and rate on a scale of 1 to 10 the level of understanding and confidence in managing their swallowing problems that the information provided by SLT practitioners during FEES were able to give.

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Where appropriate, onward referrals were made e.g., for upper GI endoscopy, radiological investigations or therapy

Results and analysis

Since implementation of the clinic, between May 2016 and January 2020, 334 patients were triaged to the Swallow Disorder Clinic (SDC). Most referral sources were from secondary care services such as internal referrals from SLT, ENT and Gastroenterology. Only 24% were from General Practitioners. (Figure 1).

Patients waited an average of 41 days, 95% CI [38, 44] to access the Swallow Disorder Clinic after referral, essentially a triage to treatment time of 6 weeks.

Patient feedback results:
Of all patients undergoing FEES who completed feedback forms, 172 were complete enough for analysis.

Regarding the level of discomfort experienced during FEES, of 170 responses, 2 found it painful, 17 found it quite uncomfortable, 103 experienced slight discomfort and 47 experienced no discomfort. (Figure 2)

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With respect to satisfaction with the level of information provided, of 171 responses, the average score was 9.79 out of 10. (95% CI [9.69, 9.89])

Regarding understanding of their condition following information provided, 167 responses scored an average of 9.18 out of 10 (95% CI [8.98, 9.38]

Regarding the confidence to manage their own swallowing condition, the 165 responses rated 8.70 out of 10 (95% CI [8.38, 9.02]

Of the 335 patients referred to SDC 295 attended clinic. All but 9 patients had FEES performed. 33 demonstrated normal swallow, 142 had mild dysphagia, 98 had moderate dysphagia and 13 had severe dysphagia. For the 295 clinic attendees 184 onward referrals were made. The majority were referred onwards for ongoing speech and language therapy, whether in the community or hospital setting. 25 patients were referred onto an ENT consultant clinic, 10 referred to Gastroenterology and 7 were referred for barium swallow. 153 patients therefore did not require further treatment and were discharged from this one stop clinic.

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Discussion

We describe a “one -stop” approach to the assessment, diagnosis and initial management of dysphagia, which has the potential to reduce waiting times and is acceptable to patients and referrers.

Patients on the new pathway received considerably less ionising radiation in their workup. The previous local pathway for patients with swallowing disorders included an initial appointment in ENT consultant clinic, request for outpatient barium swallow then further outpatient appointment with results for all patients. Of the 335 patients triaged to the SDC only 7 were referred on for barium swallow.

Barium swallow is a useful diagnostic tool for assessment of oesophageal dysphagia, which is beyond the scope of FEES. With appropriate history and triage, in which oesophageal dysphagia/obstruction can be ruled out, barium swallows can be avoided.

Ionising Radiation (Medical Exposure) Regulations (2017) in regulation 11.1.b state that exposure may not be carried out unless it has been justified, prior to the exposure, by a practitioner who must ensure that there is a net benefit to the exposure [2]. The typical effective dose of radiation from a Barium Swallow study is 1.5 mSv, the equivalent of 75 chest x-rays or 8 months of background radiation.

The multi-professional Advanced Clinical Practice (ACP) in England (2017) framework sets out a vision to develop the allied health professional workforce in a consistent way to ensure

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safety, quality and effectiveness [3]. An ACP SLT with expert skills in dysphagia assessment, diagnosis and management, working in parallel with an ENT consultant provides the ideal rigor to support patients presenting with dysphagia who would have traditionally been seen by ENT alone. Although the evidence is sparse there is a longstanding relationship of joint working and SLT led voice clinics. The published literature has demonstrated that as much as 81.3% of voice patients referred do not require ENT specialist interventions[4], tackling this could reduce the length of ENT waiting lists.

Speech and Language Therapists can be trained in ACP roles to have the appropriate knowledge and skill to offer transformative change in healthcare pathways. ACP roles can improve opportunities for career progression, job satisfaction, recruitment and retention as well as driving improvements in health and wellbeing, restoring and maintaining financial balance and delivering a quality service.

The evidence is sparse currently for parallel clinic collaborations between SLT ACPs and ENT. Two Australian studies demonstrated improved pathways for patients presenting to ENT with swallow and voice disorders with reduced waiting lists, minimal number of patients requiring ENT assessment or adverse incidents [5,6].

We sought to implement the SLT led pathway and evaluate its impact on waiting lists, improved safety through reducing unnecessary procedures and gather patient experience on its acceptability.

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When considering potential risks of commencing an alternative pathway, issues such as accountability, adverse incidents, skilled workforce, missed diagnosis and lack of acceptance from colleagues may be raised. Success factors for non-medical-led clinics have been identified.

Who performs FEES is a contested issue globally. Royal College of Speech and Language Therapists affirmed that FEES is within the scope of practice for SLTs with expertise and specialist training. In some countries it may be a joint role between SLP and laryngologist e.g., US, Canada, Japan and South America. Phoniatricians, usually ENT physicians, take the lead in some countries e.g., Germany, Italy, Spain and Egypt, or it may be the Neurologist. Whilst the physician has an advantage of being the most qualified to relate dysphagia to the underlying medical problem, the SLT(P) has the broadest knowledge of swallowing and its disorders. SLT(P) are able to offer differential diagnosis and management including postural adaptations, texture modifications, therapeutic interventions and behavioural treatments which is often the first line of treatment. [7]

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Conclusion

This pathway transformed the service to provide a more holistic approach, dramatically reducing waiting times and referral on for unnecessary procedures. The "one stop" clinic provides timely, detailed swallowing assessment, improved communication with immediate advice, biofeedback and therapy.

This pathway enables SLTs to develop their advanced skills and allows low complexity cases to be managed away from oversubscribed Consultant clinics. It supports innovative practice and improves pathways whilst not affecting their productivity.

The pathway offers a quality, holistic, patient centred approach to multidisciplinary management of swallowing disorders with shared leadership in a cost effective and evidence-based framework. The SLT and ENT disciplines compliment perfectly to ensure timely and accurate diagnosis and onward referral to specialities i.e., neurology and voice therapy which may not have traditionally been identified. SLTs developing advanced practice roles, traditionally reserved for medical consultants, create opportunities for a new, innovative, fluid workforce.

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Future considerations

Patient experience data gathered in this study looked at patient comfort during FEES, assessing the SLTs skills in endoscopy, and whether information provided increased understanding and confidence in managing their swallowing difficulties. Future research would be beneficial to determine benefits of this model compared to traditionally led ENT models. Areas for further evaluation could include:

- Longitudinal follow up- did patients bounce back for the same issue to ENT or any other service or primary care?
- The benefits of a SLT led combined voice and swallow parallel clinic
- The role of SLT as first contact practitioners in suspected cancer patients presenting with voice and/or swallowing difficulties
- Perceptions of the ENT / SLT workforce on this combined approach "parallel model"

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Competing interests:

The authors declare none

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Summary statement:

- Flexible Endoscopic Evaluation of Swallowing is within the scope of practice for SLTs with expertise and specialist training in the United Kingdom
- A similar SLT led pathway for patients with dysphagia and dysphonia in Australia in the published literature has shown safe, effective and beneficial changes to ENT service delivery.
- With appropriate training and clinical governance, ACP SLTs can diagnose and manage low complexity dysphagia.
- This pathway demonstrates a reduction of referral to treatment time, reduced ionising radiation and good patient experience.

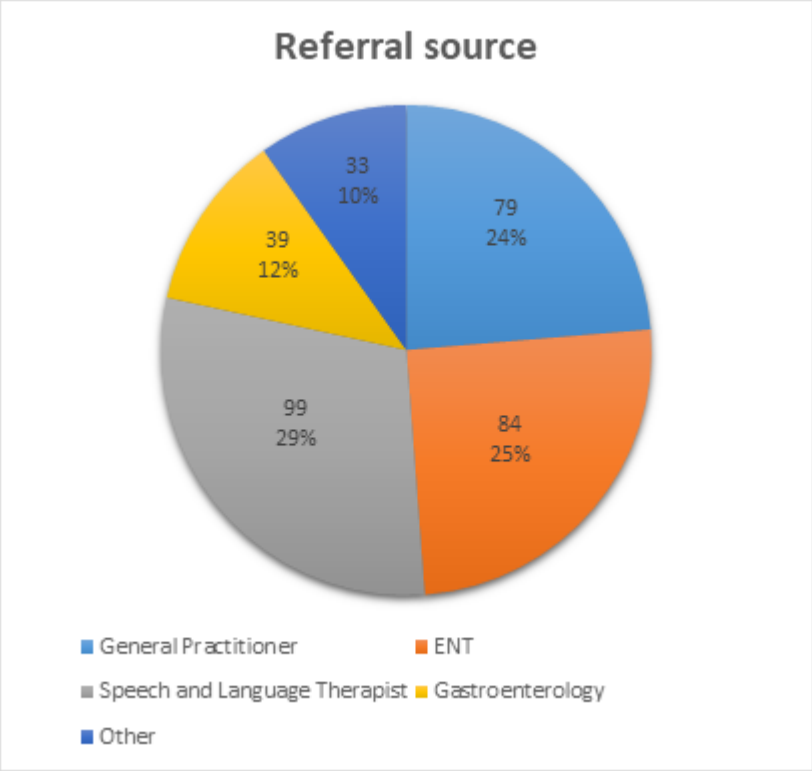

Figure 1 A pie chart demonstrating source of referrals to the service

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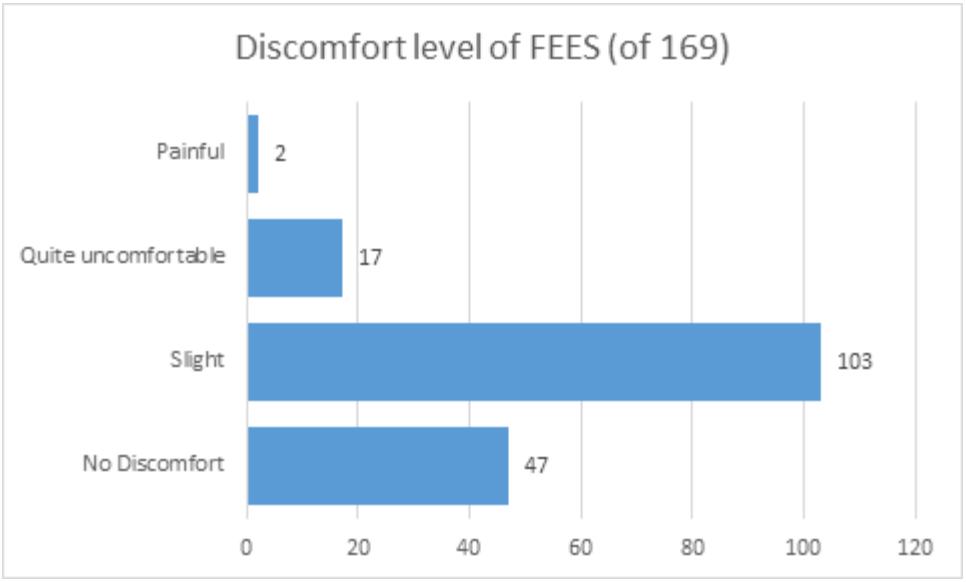

Figure 2 A bar chart demonstrating number of individuals rating levels of discomfort of fibreoptic endoscopic evaluation of swallow

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