

A rapid access husky voice clinic: useful in diagnosing laryngeal pathology

A. RESOULY, F.R.C.S., A. HOPE, F.R.C.S., S. THOMAS, M.R.C.S.

Abstract

A new established pilot husky voice clinic with agreed referral protocols for patients at risk of developing laryngeal malignancy was audited. Thirty-four patients were seen, 41.2 per cent having abnormal findings on flexible nasendoscopy, 29.4 per cent requiring rigid endoscopy, 38.1 per cent were discharged after the initial visit. One case of early laryngeal cancer was picked up during this period from this group of patients. The data for the remaining population in Portsmouth was examined, and a further eight cases of laryngeal cancer were diagnosed in keeping with national incidences. A rapid access clinic with agreed protocols that referring practitioners adhered to, was useful for diagnosing laryngeal cancer and should meet the requirements of the government's 14-day rule.

Key words: Laryngeal Neoplasms; Endoscopy; Population Surveillance

Introduction

Rapid access clinics with agreed protocols for patients presenting with acute chest pain,¹ breast lumps,² and children with acute symptoms³ are all well documented, and play a role in improving healthcare in the UK. Within otolaryngology a clinic specifically targeted at patients with neck masses has also been described⁴ and is becoming more widespread.

Laryngeal malignancy represents a disease process where treatment of early disease affords better prognosis. Early referral and detection will not only allay patient and family practitioner concerns, but may improve patient prognosis.

A rapid access clinic for patients with a husky voice, who are in the 'at risk' category was introduced, and the results from its first year are presented.

Method

A group of general practitioners (GPs) from the Portsea Island area covering a population of approximately 100 000 people were selected to take part in the pilot study. The Department of Otolaryngology and selected GPs participating in this project agreed referral criteria. An ENT consultant briefed all participating GPs on all aspects of the rapid access endoscopy service.

The referral criteria were a hoarse voice of greater than three weeks duration in current or ex-smokers, and patients who have dysphagia as well as a hoarse voice. Patients who fulfilled these criteria were to be

seen within five working days within existing out-patient clinics. Patients who were hoarse or dysphagic, and did not fall into the above categories were to be referred to consultants in the usual manner. The agreed protocols for referrals were printed on a tick box type proforma, which also included patient details (Appendix 1). This was then communicated from the GP by facsimile to our Department. All patients were seen within five working days, the findings were recorded on a second out-patient proforma.

Information recorded in clinic from the history included, duration of hoarseness, presence or absence of dysphagia or otalgia, and a smoking and alcohol consumption history. All patients underwent flexible fibre-optic nasendoscopy as part of the examination, and these findings along with a presumed diagnosis were also recorded. The form was in triplicate with copies for the notes, an audit copy and a copy for the GP, which was relayed on the same day by facsimile (see Appendix 2).

The audit period was from 1/3/98 to 15/1/99, with information concerning patient demographics, appropriateness of referral, departmental management of the system, and patient all recorded.

As way of a crude comparison, information from theatre registers on all rigid endoscopies with biopsy was collected for the same trial period for the entire Portsmouth area (a population of 700 000). The histological findings for all these biopsies were analysed, and the number of significant pathologies compared with the study group. The cancers picked

Appendix 1

GP referral form for the rapid access endoscopy clinic.

**RAPID ACCESS ENT ENDOSCOPY CLINIC
FOR THE INVESTIGATION OF HOARSE VOICE**

Patients Name: _____ Date: _____
 Address: _____ Referring Doctor: _____
 DOB: _____
 Patients Day-time Telephone Number: _____ Surgery FAX No: _____

Referral Criteria

- Patients with a history of a hoarse voice of 3 or more weeks duration and who are current or ex-smokers.
- Patients with painful dysphagia.
- Patients who are hoarse or dysphagic and do not fall into the above categories, please refer in the usual manner.

REFERRAL
Please complete below

Age _____

Hoarseness	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Shortness of breath	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Painful dysphagia	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>

MECHANISM OF REFERRAL – WENDY BLADES, ENT OUTPATIENTS
PLEASE FAX: 01705 286708

up from theatre records were then crosschecked against their referring GP to ensure they should not have been included in our rapid access study.

Results

During the study period a total of 34 patients from the Portsea area were referred to the rapid access ENT endoscopy service. There was a surprising male: female ratio of 12:22, with an average age of 58.1 (range 34–87).

Of these patients 94.1 per cent were seen within five working days, one cancelling for one month due to family problems whilst a second failed to attend clinic on five occasions and has subsequently been excluded from our trial.

A hoarse voice was present in 33 (97.1 per cent) of the patients reviewed, one patient was referred with a lump in the throat as sole symptom. The mean duration of hoarseness was 22.6 weeks, (range 0.6–104 weeks) only one patient complained of otalgia, one of a lump in the throat and eight of dysphagia (23.5 per cent).

Appendix 2

Specialist assessment form for the rapid access endoscopy clinic.

White: Hospital Copy
Pink: GP Copy
Green: Audit Copy

Rapid Access ENT Endoscopy Clinic Specialist Assessment Form

Consultant: _____ Examining Doctor: _____
 Date Referred: ____/____/____
 Clinic Date: ____/____/____
 Seen within five working days: Yes/No

History: Please tick/circle as appropriate

Duration of hoarse voice (No. of weeks): _____

Dysphagia:	Yes/No	Earache:	Yes/No	Right/Left
Smoker:	Yes	Ex Smoker/If Stopped – when?	_____	Non Smoker <input type="checkbox"/>
	No. cigarettes/day	<input type="checkbox"/>	No. ounces/week	<input type="checkbox"/>
				How many years? <input type="checkbox"/>
Alcohol intake:	No. of units per week:		<input type="checkbox"/>	
Nasendoscopy:	Normal	<input type="checkbox"/>	Abnormal	<input type="checkbox"/>

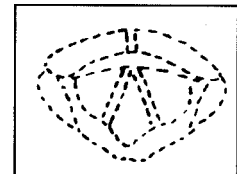
(Please document)

Neck:

Final Diagnosis:

Normal Larynx: => Discharge
 Speech Therapy

Abnormal Larynx



Management:

TCI Direct Endoscopy:

1. Further Investigations : => BA Swallow: CT Neck:

Other: _____

When considering risk factors the group comprised two (5.9 per cent) non-smokers, 23 (67.6 per cent) current smokers and nine (26.1 per cent) ex-smokers. There were six (17.6 per cent) teetotallers, the rest consumers of alcohol averaging 10.8 units per week (range 1–40). Nasendoscopy findings were normal in 20 patients (58.8 per cent) and abnormal in the remaining 14 (41.2 per cent). Of the 38.2 per cent of patients discharged from the clinic after this one appointment, 32.4 per cent were discharged after minimally invasive investigations, including full blood count, thyroid function tests, chest X-ray or a barium swallow. The remaining 10 patients (29.4 per cent) all went on to have diagnostic rigid endoscopy under general anaesthetic.

Rigid endoscopy findings included one normal investigation, one abnormal with no need to biopsy (due to hyperaemia only) and eight out of the 10 in which a biopsy was taken. The histology on these biopsies revealed one squamous cell carcinoma, one mild dysplasia, the remaining eight histology reports all showing benign pathologies.

When the reasons for referral were audited, five (14.7 per cent) of the original 34 were inappropriate. Two were non-smokers, two had been hoarse for less than three weeks and one had the wrong symptom

set with just a lump in the throat. These patients should have been referred through the usual channels.

When all the rigid endoscopies were reviewed for the same trial period a total of 118 were performed. Ten of these were on patients referred via the rapid access clinic and were subsequently excluded leaving 108. When the histology of this group was reviewed eight laryngeal tumours were recorded along with five tumours at other sites. Seventeen biopsies were reported as dysplastic and 48 as benign. In 29 cases the biopsy was reported normal and in three cases there were insufficient tissue for reporting.

Of the eight laryngeal tumours, and the 17 dysplastic biopsies picked up through operating lists, none were referred from GPs participating in the trial.

Discussion

Cancer of the larynx is a relatively uncommon malignancy. GPs can expect to diagnose one or two new laryngeal malignancies in their working lifetime. Its incidence in the UK is 1 in 100 000, and a similar incidence was found in our study group. Although there is male preponderance of carcinoma of the larynx, this was not found in our rapid access group where 22:12 of the patients were female. This may represent heightened female concern about symptoms. It may also be that the referral criteria were not selective enough.

The referral system in our hands worked in all but two cases, 94 per cent of cases being seen within five working days. The two failures were informed but failed to attend clinic of their own volition.

The GPs met the referral criteria in the great majority of cases. However, 14.7 per cent of cases were inappropriately referred. Surprisingly a number of patients had been hoarse for less than three weeks, two were non-smokers whilst others had symptoms such as a lump in the throat; this could represent patients that GPs found difficult to manage or that the guidelines were not sufficiently explicit.

To minimize waste a rapid access clinic should ideally be a one-stop clinic identifying serious pathology warranting further investigation. In our study only 36.4 per cent of cases were seen in such a manner. Another 33.7 per cent were investigated for benign pathology and were reviewed on subsequent occasions. It is interesting to note that only 39 per cent of nasendoscopies performed in the trial were abnormal.

In both the routine and rapid access groups the ratio of malignant to benign pathology was similar, suggesting a similar case mix in both arms of our study, but larger numbers of patients would be needed to confirm this. The one cancer that was detected in this series was a relatively early T₂N₀; this may be chance, but may represent early detection through quick and efficient management of the referral.

Conclusion

With patients whose symptoms were suspicious of laryngeal cancer, our rapid access service was well utilized by GPs and efficiently managed in our department. Our aim was to detect early cancer in an attempt to improve the patient's individual prognosis. However, when dealing with such a rare condition, our study was too small to generate numbers that could be statistically significant.

This project has put in place a methodology that should allow the ENT department to fulfil its obligation under the 14-day rule, a new requirement for all patients with suspected cancer, which is a fundamental part of the White Paper (The New NHS, 1997).⁵ It also meets the government's commitment to streamlining all stages in the pathways of cancer care, as set out in the recent white paper (The NHS Plan, 2000).⁶ Ultimately targets for the times between referral and diagnosis in all cancer types will be published.

With the government's commitment to cancer services, and the small incidence of laryngeal cancer, it would be desirable to extend this project to the entire health region and repeat the audit cycle. This may then determine whether the stage of cancer picked up is indeed earlier, and whether this ultimately improves an individual's prognosis. A study of patient satisfaction with the quality of the service in our rapid access clinic, compared to standard referral mechanisms, is another potential project.

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Address for correspondence:

Mr Andrew Hope,
Department of Otolaryngology,
Wexham Park Hospital Trust,
Slough, SL2 4HL, UK.

Fax: 01753 633119

Mr A. Hope takes responsibility for the integrity of the content of the paper.

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