

Do rhinology care pathways in primary care influence the quality of referrals to secondary care?

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Abstract

Background: Chronic sinusitis is the most common routine presentation for a general ENT surgeon. The 2007 'Primary Care Guidelines: European Position Paper on the Primary Care Diagnosis and Management of Rhinosinusitis and Nasal Polyps' aimed to deliver evidence-based guidelines for the diagnosis and management of rhinosinusitis in specialist and primary care.

Objective: The aim of this audit was to assess the information provided in the referral letters to the ENT department regarding patients with potential rhinosinusitis, and compare this to the information required for the rhinology care pathways.

Method: We evaluated one month of referrals to the ENT department.

Results: The quality of information in the referral letters was poor. Only 22 per cent of patient referrals included basic information about symptoms, duration and treatment.

Conclusion: We plan to investigate why general practitioners are not complying with the pathway. In addition, the pathways will be more widely disseminated via the 'Map of Medicine' (an online resource for general practitioners). This should facilitate the receipt of the best evidence-based treatment for patients prior to referral to secondary care.

Key words: Primary Healthcare; Rhinitis; Sinusitis; Practice Guidelines as Topic

Introduction

Chronic rhinosinusitis is a common condition. A survey of 1200 households in Nottingham, UK revealed that 13.7 per cent of people surveyed had suffered from rhinosinusitis in the previous year.¹ Chronic sinusitis and rhinitis are the most common routine presentations for a general ENT surgeon.² Rhinosinusitis affects males and females of all ages. It is characterised by inflammation of the mucous membranes of the nasal cavity and paranasal sinuses.³ Rhinitis and sinusitis often coexist and it can be difficult to distinguish between them. Therefore, the most effective diagnostic and management strategies address both conditions, hence the term rhinosinusitis.

The 2007 (EPOS) 'Primary Care Guidelines: European Position Paper on the Primary Care Diagnosis and Management of Rhinosinusitis and Nasal Polyps'⁴ was produced by a group comprising ENT surgeons, allergists and primary care physicians. It sought to provide an updated, evidence-based summary on rhinosinusitis and nasal polyps, and a consensus guideline for the diagnosis and management of acute and chronic rhinosinusitis in primary care and specialist settings. Diagnosis is based on the presence

of at least two symptoms, one being nasal obstruction or nasal discharge, and the other including anosmia, facial congestion and pain. Disease severity can be assessed using a visual analogue scale (VAS) that classifies severity according to the following categories: mild (0–3), moderate (4–7) and severe (8–10). A VAS score of more than 5 adversely affects a patient's quality of life.

Anterior rhinoscopy is recommended in primary care (or non-ENT specialist settings). Treatment should include a trial of a nasal steroid spray, nasal douches with saline and, if the patient has allergic symptoms, an antihistamine.⁵ In our ENT department, we experienced significant degrees of variation in treatment and time prior to referral to secondary care.

In order to streamline referrals for this common condition, rhinology referral pathways were developed (Figure 1) based on the flow charts from the European position paper on rhinosinusitis and nasal polyps 2007.⁵ The pathways were introduced to general practitioners in the Plymouth area in September 2008. The pathways give advice on treatment in primary care and on the appropriate time to wait before instigating a referral to the ENT department.

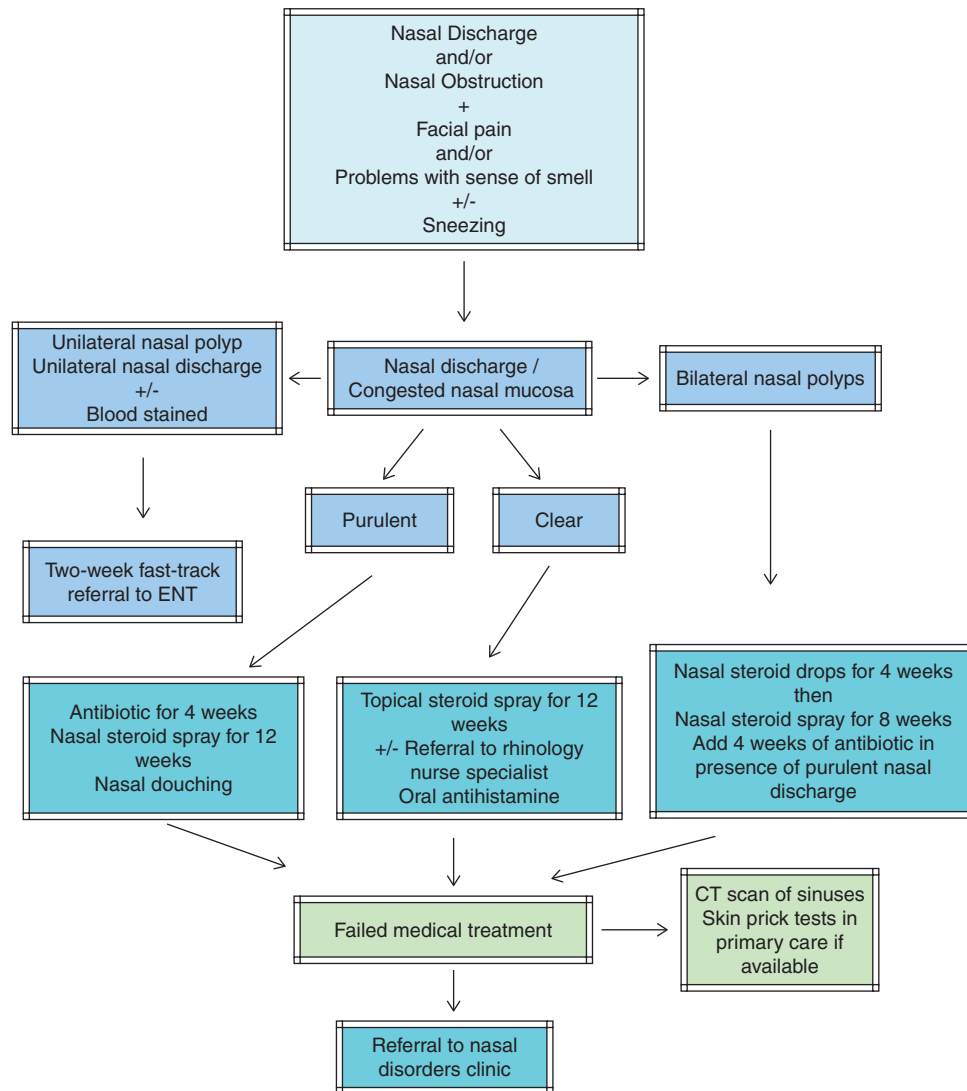


FIG. 1

Rhinology care pathway (developed by author Prof Khalil). CT = computed tomography

The referral pathways include signs and symptoms which need to be investigated or referred urgently. The pathways also give detailed information regarding when to request a computed tomography (CT) scan of the sinuses in primary care, and the different types and duration of antibiotics to prescribe for chronic sinusitis. This is to ensure that patients receive appropriate treatment prior to secondary care. This also helps to streamline services and ensures that patients are treated in the most efficient and timely manner. For those patients in whom medical treatment failed and a CT scan was performed prior to specialist referral, there is a reduction in the time spent awaiting the results of investigations as well as timely listing for surgery when indicated. Acute viral rhinosinusitis (common cold) is defined by symptoms that resolve within 10 days. Acute non-viral rhinosinusitis is defined by symptoms that worsen after 5 days, or do not resolve within 10 days, but last less than 12 weeks. Chronic rhinosinusitis is diagnosed when the symptoms last for more than 12 weeks.⁵

The aim of this audit was to assess the information in the referral letters to the ENT department regarding patients with potential rhinosinusitis, and compare this to the information required for the rhinology care pathways.

Materials and methods

We audited consecutive referrals of patients to the ENT department with symptoms suggestive of rhinosinusitis over a period of one month. This identified a total of 55 referrals. Patients referred with symptoms unrelated to rhinosinusitis such as nasal obstruction secondary to a deviated nasal septum were excluded. The referrals were audited against a standard rhinology referral pathway provided to general practitioners in the Plymouth area.

Results

Patient ages ranged from 7 to 79 years, with an average age of 44 years. The information provided in the referral letters was mostly inadequate in relation to the

information requested in the rhinology care pathways (Figure 1). Only 22 per cent of patient referrals complied with the referral pathway criteria. The quality of documentation provided with referrals varied greatly. For 78 per cent of patients, the duration of their nasal symptoms were reported. For 61 per cent of patients, findings of a nasal examination were recorded. A breakdown of the different elements documented is shown in Figure 2.

The duration of treatment with nasal spray differed greatly between patients, with a range of 4 weeks to 4 years. Twenty-one per cent of patients were given antibiotics for variable durations; the mean duration of antibiotic prescription was four weeks. For one patient, a CT scan had been requested.

Discussion

Chronic rhinosinusitis is a common disease that is thought to affect between 5 and 10 per cent of the urban population.⁶ In rhinosinusitis, the cause of nasal obstruction is secondary to the inflammation and swelling of the nasal mucosa. Other causes of bilateral nasal obstruction include nasal polyposis, deviated nasal septum and turbinate hypertrophy. Nasal polyposis is often initially treated with nasal steroids. Turbinate hypertrophy normally occurs secondary to rhinitis. Therefore, both these conditions may be improved with a steroid nasal spray. A deviated nasal septum should be seen on anterior examination of the nose and requires surgical intervention only if causing significant nasal obstruction.

There is a drive to treat patients in the community and reduce the number of secondary care referrals. There is no data for the correct diagnosis rates of rhinosinusitis by general practitioners. There is also a perception that general practitioners may not wish to request certain investigations such as a CT scan of the sinuses, and would be unhappy to pursue a course of treatment prior to a specialist review. Examination of the referral letters demonstrated that

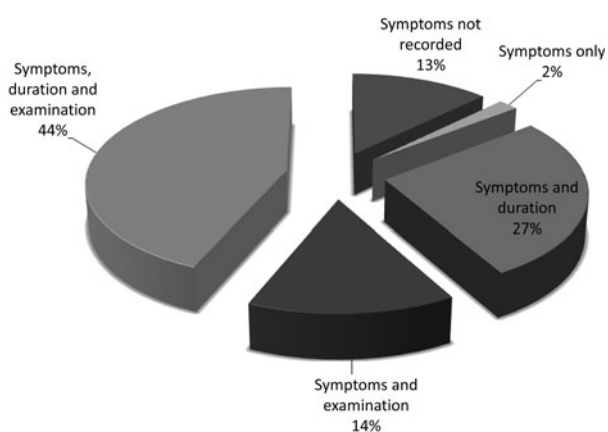


FIG. 2

Pie chart showing the different levels of documentation present in the referral letters.

although this may be the case for the request of investigations such as CT scans of the sinuses, this is not the case when it comes to medical treatment. Each patient referred had been started on some form of treatment prior to referral.

The Primary Care Guidelines give clear criteria regarding the diagnosis of rhinosinusitis, and recommendations on how to treat the condition depending on whether it is acute or chronic, and on severity.⁴ The guidelines also describe 'red flag' symptoms, for which the patient should be referred directly to specialist care. Within the Plymouth ENT department, it is our experience that general practitioners are generally not aware of the Primary Care Guidelines, and in some cases are not aware of any other guidelines for treating rhinosinusitis.

The aim of creating a referral pathway was to relay the guidelines to general practitioners in an accessible form, whilst making the referral process as straightforward as possible. Although rhinology care pathways have been introduced, the quality of patient referrals was shown to differ greatly and basic information was missing for many of the referrals. It was difficult to assess from the information given in most referral letters whether the patients had received optimal medical treatment prior to referral.

- **Chronic rhinosinusitis is a common presentation for general practitioners and ENT specialists**
- **This study focused on the 'Primary Care Guidelines: European Position Paper on the Primary Care Diagnosis and Management of Rhinosinusitis and Nasal Polyps'**
- **The 2007 Primary Care Guidelines present evidence-based, internationally agreed recommendations for initial treatment of rhinosinusitis**
- **There is wide variation in the treatment given to patients prior to specialist referral**
- **The introduction of a rhinology referral pathway did not, by itself, lead to improvements in referrals**

Part of the proforma included documentation of examination findings. The Primary Care Guidelines recommend that anterior rhinoscopy should be undertaken in the absence of available endoscopy.⁴ Anterior rhinoscopy is conventionally undertaken with a headlight and Thudicum's speculum, which may not be readily available in a general practice; however, this examination can also be performed using an otoscope. The rhinology pathways developed recommend that, in a primary care setting, the nasal cavity should be examined using an otoscope. It is possible that the examinations were performed but the findings were not recorded. Other possible reasons for the lack of documentation of examination

findings include a lack of suitable equipment or physician familiarity with the examination, a lack of time during the consultation, or a perceived lack of additional information that might be gained from the examination. Details about the type and duration of treatments given are particularly useful when included in the referral letters. Patients are often unsure of the type of preparations they have used. This lack of patient knowledge about prior treatment can lead to undue repetition of medication that has previously proved to be ineffective.

With only 22 per cent of referrals complying with guidelines in terms of the basic information provided, it is clear that there is still much work to be done. Our next steps are to investigate why general practitioners are not complying with the pathways. The pathways will also be more widely disseminated via the 'Map of Medicine' (an online resource for general practitioners).⁷ This should facilitate receipt of the best evidence-based treatment for patients prior to referral to secondary care.

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Miss N Su takes responsibility for the integrity of the content of the paper

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