

Oesophagopharyngeal reflux

GASTROESOPHAGEAL reflux disease (GORD) is the most common oesophageal disease. Besides the typical presentation of heartburn and acid regurgitation, GORD can cause atypical symptoms. An estimated 20–60% of patients with GORD have head and neck symptoms without heartburn¹ and at least 10% of patients who attend a general ear, nose and throat clinic will have symptoms or signs related to reflux.²

Gastroesophageal reflux is the upward movement of gastric contents into the oesophagus. Oesophagopharyngeal reflux, more recently known in the United States as laryngopharyngeal reflux, is the movement of gastric contents beyond the oesophagus up to the pharyngeal and laryngeal area.

Oesophagopharyngeal reflux is different from gastroesophageal reflux both in symptom presentation as well as findings.

Some degree of reflux in the distal oesophagus is considered normal. A number of defence mechanisms, the so-called anti-reflux barrier, prevent the oesophagus from being injured by the corrosive action of gastric acid. This barrier consists of:

1. The lower oesophageal sphincter tone.
2. The crura of the diaphragm.
3. The oesophageal peristaltic acid clearance.
4. The mucosal resistance.
5. The salivary secretion.
6. The upper oesophageal sphincter tone.

The mechanism of oesophagopharyngeal reflux is different to that of gastroesophageal reflux. It is believed that the primary cause for the development of oesophagopharyngeal reflux might be upper oesophageal sphincter dysfunction.³ In contrast to the oesophagus, the pharynx, larynx and tracheobronchial tree are not adapted to handle reflux and, therefore, any presence of acid reflux in the laryngopharyngeal area is abnormal and potentially harmful.⁴ Patients with oesophagopharyngeal reflux usually deny heartburn, which is the commonest presentation of gastroesophageal reflux. Koufman showed that only 20–43% of patients with head and neck symptoms complained of heartburn.³ Another study revealed that only 18% of patients with head and neck manifestations of gastroesophageal reflux had oesophagitis.⁵ Patients with gastroesophageal reflux have oesophageal dysmotility, whereas those with oesophagopharyngeal reflux have good oesophageal motility.⁵ Finally gastroesophageal reflux patients are mainly supine (nocturnal) refluxers, while oesophagopharyngeal reflux patients are predominantly upright (daytime) refluxers.⁶

The patient's description of symptoms is important. Damage by the acid refluxate beyond the oesophagus can cause a variety of symptoms, the so-called atypical manifestations of reflux, which can be divided into pulmonary symptoms like pneumonia, chronic cough, asthma, chest pain and otorhinolaryngological manifestations, such as

globus pharyngeus, dysphonias, sore throat, posterior laryngitis, subglottic stenosis and otitis media with effusion⁷ (especially in children). Finally, the association between GORD and carcinoma of the upper aerodigestive tract has also been proven.⁸ The most common symptom reported by patients with oesophagopharyngeal reflux is a 'lump in the throat' (globus pharyngeus). Studies have shown that in 23–60% of patients with globus symptoms, GORD is the aetiologic factor.⁹ Laryngoscopy (indirect or direct) can aid the diagnosis of laryngeal reflux. Inter-arytenoid erythema, oedema of the vocal folds, pooling of secretions in the laryngo-pharyngeal area and inflammatory lesions of the vocal cords are some of the laryngoscopic findings in oesophagopharyngeal reflux. The gold standard test for diagnosis of oesophagopharyngeal reflux is the dual-probe, 24-hour pH monitoring where the probes are placed, under fiberoptic laryngoscopic visual control, in the pharynx and oesophagus. This is an easy method that can be reproduced and avoids the use of manometry.¹⁰

Treatment of oesophagopharyngeal reflux is mainly drug therapy. The popular opinion that lifestyle modifications alone (cessation of smoking, decreasing alcohol intake, avoidance of fatty foods and drinks containing caffeine, weight loss, elevation of the head of the bed, eating smaller meals, avoiding eating within 4 hours of bedtime and recumbency within 3 hours after dinner) can improve the disease process of reflux has not been proven. On the other hand, drug therapy, when combined with these lifestyle changes, appears to be the treatment of choice. The treatment for oesophagopharyngeal reflux should be more aggressive and prolonged⁶ than the one for GORD. The larynx is not 'built' to tolerate reflux, and therefore the doses of proton pump inhibitors or other anti-reflux medication (antacids or H₂ antagonists) should be double or more the standard GORD dose. Treatment should be over many months for the symptoms to resolve themselves, and regular follow-ups are necessary to monitor response to treatment and adjust dosage. Reassurance is important and can be rendered more real for the patient if the otolaryngologist takes time to demonstrate images of the relevant areas on a video monitor using flexible endoscopy. Voice therapy^{11,12} has been used for some of the atypical manifestations of reflux, such as dysphonia and globus pharyngeus. Adequate rehydration, voice exercises and advice can be particularly helpful in the case of globus pharyngeus.

There is an important relationship between reflux and oesophagopharyngeal problems and this should be acknowledged by physicians and patients in order to facilitate diagnosis and improve management.

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General practice vocational training — a victim of its own success?

VISITORS to Ireland tell of stopping to ask directions at a remote crossroads, only to receive the enigmatic reply 'if I were going where you want to go, I wouldn't start from here in the first place'. A crossroads is a place for choices, where the pilgrim needs to take stock, ask advice, make judgements, and act upon them. General practice in the United Kingdom (UK) has come to such a point with its radical new contract.¹ So also has its system of training, which is facing change as never before. We do not have the luxury of re-inventing our general practitioner (GP) training system. However, when we try to plan where to go from here, we discover that we know less than we thought about the historical effectiveness of our training, not to mention its future potential.

Kramer *et al.*,² reporting their work on the acquisition of clinical skills by trainees, begin with the astonishing statement 'little is known about the effect of postgraduate training on the competence of trainees'. They conclude that further research into where and when the acquisition of skills takes place, and into the role of the GP trainer, is needed. They also show that the hospital component of training contributes less in this regard than does the time spent in general practice. Searching the UK literature leads to the same broad conclusions. We are far from having a clear answer to the most fundamental question of all — how effective is our training? Kramer *et al.* confirm that a range of specific skills can be taught effectively and demonstrably learnt. Their findings are welcome and not contentious. What is still in question is the extent to which the whole package works towards its finished product. This has serious implications for the path ahead. The World Health Organisation has adopted the position that every developed health system must depend on the quality of primary health care for improving health outcomes.^{3,4} This places a heavy burden of responsibility on the system of training for general practice to deliver a workforce that is competent and effective.

The history of vocational training in the UK is well known.⁵

The crossroads is characterised by a cluster of issues. These include the manpower crisis faced by UK general practice,⁶ the prospect of a messy divorce of GP training from its traditional hospital base,⁷ reorganisation of the hospital junior training grades,⁸ introduction of a unitary specialist training authority,⁹ and a burgeoning industry in innovative schemes for further training.¹⁰

It is increasingly clear that large numbers of those who complete vocational training are not making the natural transition into full-time posts as principals in general practice, despite an abundance of vacancies.¹¹ Possible reasons for this include temporary emigration and taking a career break for family or other personal circumstances. However, it is a strong possibility that they feel unprepared for the full task. It may be that a large part of what is needed is simply to extend and widen the agenda of existing training, but we have detached ourselves from the notion that time spent in training equates with efficacy. The registrar year is perceived as one that is unbalanced because of the burden of assessment tasks. It is possible that a longer training period will merely constitute an additional barrier for new graduates who are considering their career options. Perhaps a perception that training for general practice is not an easy option is a positive and realistic one. It challenges providers to instil confidence that programmes of training will be attractive and provide thorough preparation for the increasingly demanding role of the GP.

As we stand at the crossroads those at the sharp end of training might contemplate two divergent possibilities: the dream and the nightmare.

The dream might be summarised as a continuing, incremental growth in resources and enlightened development, guided by research to shape cost-effective, mind-broadening programmes that produce enough reflective, competent, life-long learners to satisfy the needs of the NHS.

The nightmare is that we might be creating a monster that will produce a frenzy of unmanageable activity, devour

resources, and still fail to deliver. Paradoxically this springs from the realisation of the worth of general practice and its success as a training ground. Our success in embracing educational principles has attracted attention and admiration.¹² The distribution of practices throughout the realm, the prevalence of trained teachers, and awareness of the teaching opportunities that reside in each practice have created the illusion of infinite training capacity.

The traditional training practice is a lean and competent unit. It supports one or two partners to carry out the training tasks. There is a tight multidisciplinary team and a minimal management structure, backed up by a sophisticated IT capacity. It takes one registrar per year and, perhaps, a few students and senior house officers (SHOs) on short attachment, and there is no redundant space within its premises to accommodate additional tasks.

Now everyone has seen the light and wants to climb aboard, for the best of educational reasons. Medical schools are delegating to GPs the full module of clinical-skills teaching, in addition to the traditional clinical attachments and electives. Junior house officer placements in practices have been introduced. New foundation programmes will offer experience in general practice for all graduates. SHOs are given regular day release from hospitals to practices and there is the prospect that their programme will become substantially based in practice. Registrar training is increasingly burdened with video work and the dual-examination structure. Retainees, retrainees, induction of foreign medical graduates; all of these need work space, educational supervision, and management.

Furthermore, multiprofessional working means that many trainees in nursing and professions allied to medicine seek work experience and placements in primary care. The primary care organisations, with their emphasis on clinical governance, rely heavily on the skills of trainers, as does the system of appraisal.

This escalation of expectation affects course organisers also. There was a time when they were expected to provide a weekly half-day-release programme. In addition to the growth in scale of training, there are an increasing number of distinct categories of trainee to track through the system (varieties of length of scheme, entry and exit points, and sequencing of posts), new requirements for individualised training pathways, and continuous appraisal through seamless training. These all threaten death by paper and spreadsheets.

Deaneries also reflect the frenzy, struggling to keep pace with demand-led tasks and, at the same time, provide some semblance of coordination, planning, and strategic thinking. The alphabet soup of worthy organisations involved with education for general practice testifies to growing complexity — RCGP, COGPED, JCPTGP, UKCRA, ACO, NAPCE, CAOGP — to mention but a few, all talking to themselves, to each other, and to the government as never before.

In short, our GP training system evolved primarily to meet the needs of registrar training. It is struggling even to provide integrated 3-year schemes for its own candidates. The concept of taking on fundamental training for the whole NHS medical workforce is ideologically pure, but in practice a fantasy, unless there is a revolution in the available infrastructure.

There is a perception among GPs that by showing an interest in education they will risk exposure to the escalating demands that threaten to overload the practice, damage continuity of care for patients, and stretch the good will of partners. Education can be bad for your health!

Are we creating a monster, or is this a creative ferment that will conceive and generate a world-leading training engine?

It is a long way from researching the efficacy of defined aspects of training, to creating an evidence base that will foster the dream and mitigate the nightmare. This is an intriguing, frustrating, challenging, and disturbing time to be involved with training for general practice. Fifty years ago Watson and Crick meditated on a scatter of dots on a plate, discerned therein the projection of a helix, and were awarded the Nobel prize.¹³ Whoever can deduce the fundamental structure of vocational training from the current, apparent chaos, might deserve no less.

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