minimum quality. ISI may also ask how well a particular specialty or country is represented in its coverage. And, after a few years of history, all other criteria being equal, one can look at a journal's impact.

This article has focused on journal impact factors and their role in what Stephen Lock described as "journalology."¹¹ Like individual authors, a variety of indicators can be used to judge journals in a current or historical sense. Impact numbers are probably less important than the rankings which are obtained. Often there are only slight quantitative differences involved. The literature is replete with recommendations for corrective factors that should be considered, but in the final analysis subjective peer judgment is essential.

Caution in use of impacts as surrogates

Journal impact data have been grafted on to certain large scale studies of university departments and even individuals. Sometimes a journal's impact is used as a substitute for the evaluation of recently published articles simply because it takes several years for the average article to be cited. However, a small percentage of articles will experience almost immediate and high citation. Using the journal's average citation impact instead of the actual article impact is tantamount to grading by the prestige of the journal involved. While expedient, it is dangerous. Although journal assessments are important, evaluation of faculty is a much

more important exercise that affects individual careers. Impact numbers should not be used as surrogates except in unusual circumstances.¹²

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Lesson of the Week

Acute angle closure glaucoma masquerading as systemic illness

Margaret Dayan, Benjamin Turner, Charles McGhee

Acute angle closure glaucoma can present with systemic symptoms such as headache or gastrointestinal disturbance

Acute angle closure glaucoma is a comparatively rare, acute form of glaucoma that may be associated with various systemic symptoms; these can overshadow the primary ocular problem. In some cases this delay in diagnosis may result in blindness. We report on three women who presented to our department with acute angle closure glaucoma during one fortnight. Their initial symptoms were attributed to surgical and psychiatric problems rather than to their ocular disease.

Case reports

CASE 1

A 63 year old hypermetropic (long sighted) woman presented to her general practitioner with a 24 hour history of right sided headache followed, several hours later, by vomiting, diarrhoea, and non-specific abdominal pain. Her symptoms failed to settle and she was referred to hospital and admitted under a surgical team. No cause could be found for her gastrointestinal disturbance, but the following day her right eye was noted to be red; on direct questioning she admitted to a reduction in visual acuity in that eye, which had coincided with the onset of her symptoms. She was referred to the eye accident and emergency department.

The visual acuity in her right eye was reduced to hand movements and associated with a raised intraocular pressure of 44 mm Hg (normal range 10-21 mm Hg), a fixed, mid-dilated pupil, substantial corneal oedema, and a very shallow anterior chamber. Angle closure glaucoma was diagnosed and the intraocular pressure lowered medically. Her systemic symptoms resolved completely. Bilateral laser peripheral iridotomies were

performed on the next day. Her visual acuity improved to 6/12 in the right eye compared with 6/6 in the left. A visual field examination gave normal results six weeks later.

CASE 2

A 63 year old hypermetropic woman was given amitriptyline 25 mg once daily by her general practitioner for symptoms of depression, including fatigue and insomnia. Soon afterwards she developed recurrent evening headaches accompanied by mild blurring of vision, which, she later admitted, were also associated with seeing coloured haloes around bright lights. These symptoms entirely resolved with sleep and were attributed to her depression. Consequently, the dose of amitriptyline was increased to 100 mg at night, with a concurrent increase in the frequency of her symptoms. A month later she developed persistent headache and blurring of vision in the right eye, for which she attended the eye accident and emergency department.

On examination the visual acuity in her right eye was reduced to 6/9 (compared with 6/5 on the left). This was associated with a substantially raised intraocular pressure of 60 mm Hg, a fixed, mid-dilated pupil, moderate corneal oedema, and a very shallow anterior chamber. Acute on intermittent angle closure glaucoma, precipitated by amitriptyline, was diagnosed. The intraocular pressure in the right eye was lowered medically. Bilateral laser peripheral iridotomies were performed on the same day. The visual acuity in her right eye remained at 6/9 and visual field examination showed that the visual field was constricted on the right.

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CASE 3

A 59 year old hypermetropic woman presented to her general practitioner with a four week history of intermittent frontal headaches that occurred mainly in the evening. These were associated with a one year history of episodes of blurred vision in both eyes. She had recently been bereaved and had poor appetite and bouts of tearfulness: she was given dothiepin hydrochloride 75 mg at night for what was presumed to be depression. Two weeks later her vision became blurred and her eyes red and painful. Her symptoms persisted despite treatment with chloramphenicol drops, and she developed a severe frontal headache with vomiting. She was referred to the eye accident and emergency department three days later.

On examination her visual acuities were reduced to 6/24 bilaterally in association with raised intraocular pressures of 62 mm Hg in both eyes, fixed mid-dilated pupils, bilateral corneal oedema, and shallow anterior chambers. Acute on intermittent angle closure glaucoma, precipitated by dothiepin hydrochloride, was diagnosed. The intraocular pressures were lowered medically and bilateral laser peripheral iridotomies performed the next day. Her visual acuities improved to 6/9 bilaterally, and examination showed that her visual fields were full.

Discussion

The incidence of acute angle closure glaucoma in Britain is about 1 in 1000 people over the age of 40, with a female to male ratio of 4:1.¹ It is commoner in short, usually hypermetropic, eyes that have a shallow anterior chamber and narrow iridocorneal angle.² The initiating factor in angle closure is the development of pupillary block. This is caused by contact between the iris in a semidilated pupil and the lens, resulting in blockage of the flow of aqueous humour from its site of production in the ciliary body, through the pupil, into the anterior chamber. The build up of aqueous humour in the posterior chamber results in forward bowing of the iris, which then closes the already narrow iridocorneal drainage angle, producing a rise in intraocular pressure.^{1,3} A persistent increase in the intraocular pressure will result in a progressive and irreversible loss of vision. A delay in the start of treatment may result in permanent visual loss and even blindness.

Acute angle closure can be precipitated in an anatomically predisposed eye by physiological pupillary semidilation, such as occurs in the evening or when watching television in a darkened room. Pharmacological dilation with 1% tropicamide, used routinely in the assessment of diabetic retinopathy, rarely results in pupil block, but in diabetes the iris may spontaneously half dilate rather than fully dilate owing to autonomic neuropathy. This probably explains the increased risk of angle closure glaucoma in diabetic patients.⁴ Various drugs—most commonly those with anticholinergic properties, such as the tricyclic antidepressants⁵ prescribed in cases 2 and 3, nebulised ipratropium bromide,^{6,7} and nebulised atropine⁸—have also been reported to precipitate angle closure glaucoma. Complete angle closure may be preceded by intermittent episodes of partial or temporary closure of the angle,³ which are terminated by pupil constriction induced by bright light or sleep. Between episodes, however, the eye looks perfectly healthy and the diagnosis must be based on a history of evening headaches associated with blurred vision and haloes around lights (due to the presence of corneal oedema) as in case 2, coupled with the presence of a shallow anterior chamber on slit lamp biomicroscopic examination. Patients with such symptoms should have a careful review of their drug treatment and be referred for an early ophthalmological opinion as they will require laser

Fig 1—Typical appearance of acute angle closure glaucoma in right eye: note conjunctival injection, corneal oedema, and mid-dilated pupil. Reproduced with patient's permission

peripheral iridotomies to prevent the development of acute angle closure glaucoma. Only half of the patients presenting with acute angle closure glaucoma, however, have a history of such intermittent preceding symptoms.¹

Patients with acute, prolonged closure of the iridocorneal angle may present not only with reduced visual acuity, pain, and redness of the affected eye but also with systemic symptoms such as headache, malaise, and vomiting. In some cases, and particularly in elderly people, the systemic disturbance may be so severe that the ocular symptoms are initially overlooked, as happened in case 1, and the patient may be misdiagnosed as having an acute medical or, as in this case, surgical condition. On examination the visual acuity will be reduced in a red eye which may feel hard to the touch, with a cloudy cornea and a fixed, mid-dilated pupil (fig 1). These patients require urgent ophthalmological referral for immediate medical treatment to lower the intraocular pressure, followed by definitive bilateral laser or surgical procedures. After iridotomy, iridectomy, or trabeculectomy it is safe to dilate these patients' pupils and to start treatment with anticholinergic drugs once more.

The diagnosis of acute angle closure glaucoma in a patient who presents with the sudden onset of a painful, red eye with reduced visual acuity, a hazy cornea, and a fixed semidilated pupil is comparatively straightforward. But any patient with headache, malaise, or gastrointestinal disturbance and a red eye should alert doctors to the possibility of closed angle glaucoma. This is especially important in elderly people, who may not volunteer any specific ocular symptoms.

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Caring for Older People

Public transport

T A Roper, G P Mulley

This is the sixth in a series of 14 articles edited by Eileen Burns, Neil Penn, and Graham Mulley

Most older people are mobile and able to use public transport without any problems. Those who are hard of hearing or have poor vision and those with mobility problems need not be deterred from using public transport. Though the design and provision of suitable buses, taxis, and trains is not always optimum, many now have imaginative features to help older passengers. Travel by air and sea needs extra planning for disabled elderly people, but helpful advice is available and much can be done to enable even the most disabled traveller to make long journeys confidently and in comfort.

Local travel

Most elderly travellers are able to use all forms of public transport without any problems, but those with impaired mobility and sensory impairments may have some difficulties. A disabled passenger should have the right to unrestricted access to all means of transport and be able to use them with ease and confidence.

BUSES

The Disabled Persons Transport Advisory Committee (DPTAC, a statutory body) has consulted disabled people and recommended improvements in the design of buses. These include lower steps; split level steps; "kneeling buses," whose mechanisms can effectively lower the bus and hence decrease step height; better handholds; non-slip floors; and easy to use bell pushes.

Most buses no longer have conductors. Passengers cannot expect physical assistance from drivers, who must stay in their cabs. There are training schemes to make drivers more aware of the needs of disabled travellers—for example, waiting until they are seated before driving off.

Specially adapted buses can take wheelchair users. Assistants help with boarding and securing wheelchairs. Some of these services operate semi-fixed routes and are flexible, allowing travellers to alight near or at their homes. These services also cater for the general public, and fares are charged at standard rates.

In London, the Stationlink service is a circular service that links major rail terminuses in an hourly cycle. The Airbus service links central London with Heathrow Airport and also connects with the Stationlink service. Further information can be obtained from London Transport (whose address is given below).

Senior citizens are eligible for a bus pass and can travel free or at a flat rate. The rate varies from place to place.

Visually impaired travellers may be helped by brightly coloured handrails and good lighting. The Royal National Institute for the Blind (RNIB) has produced signs for hailing buses for their blind members. Some services have produced bus information in braille and have designed fluorescent bus passes to bring the holder to the instant notice of the driver, who will help by indicating when the destination has been reached. Further information can be obtained from the RNIB.

For hearing impaired and speech impaired people, there are special forms to inform the driver of their destination. These forms are available from local bus operators or local disability organisations.

TAXIS

From 1 February 1989 no London taxi could be licensed for the first time unless it could carry a passenger in a wheelchair. From 1 January 2000 all taxis in London are to meet this requirement. The wheelchair rule is statutory in London and can be applied by district councils elsewhere.

Taxis provide door to door service, can be booked in advance, and can be hailed in the street, but they are expensive and not all are accessible to wheelchairs. Taxis that are accessible to wheelchair users have wider door frames and wider angle of opening, and ramps; the rear bench seat tips back to admit the wheelchair user and provide room to manoeuvre more easily; the fixed partition between the driver's and passenger's compartments has been moved forward on the nearside to provide extra space to position the wheelchair; and there are restraints for the wheelchair and a special safety belt for its user.

For blind and partially sighted travellers the RNIB produces signs for hailing taxis.

COMMUNITY SCHEMES

Dial-a-ride—Most cities have developed a door to door service designed for mobility impaired people that is accessible to wheelchairs. It is for disabled local resi-

"Portrait of the Artist's mother" by Vincent van Gogh

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