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Sir,

Choose and Book audit in a secondary eye care unit Choose and Book (C&B) is a national electronic booking service introduced in England since 2004.¹ An audit of C&B was performed at the West of England Eye Unit (WEEU) in Exeter over concerns of inappropriate referrals with this system. The total number of referrals received between 19th February 2007 and 15th May 2007 was 609. The total number of rejections during the same period was 148. We calculated an average number of 10.32 referrals and 2.49 rejections per working day. The most common reasons for rejections were: redirection of referral to another clinic (61%, mostly to cyst or minor operations clinics), necessity to book additional assessments for same visit (15%, including orthoptic and optometric assessments and glaucoma screening tests), and upgrading the priority of a referral from routine to urgent (14%).

We noted a poor understanding across the spectrum of hospital staff in our department of what C&B was and how it worked. We also noted that some general practitioners (GPs) delegated the bookings to administrative staff. Some patients were not receiving cancellations following rejection of a C&B request. The system should allow GPs to identify a rejected C&B request, rebook it and inform the patient of this change. Following the identification of this problem in our audit, the C&B team introduced an automated cancellation letter. Presently, we are assessing ways of redirecting appointments within WEEU rather than sending rejections back to the GP. We also wish to be able to include ancillary tests (such as visual fields and orthoptic and optometric assessment) as part of C&B system. At present, WEEU runs a C&B system in parallel with a paper-based referral letter system but this audit highlighted the present difficulties with C&B at WEEU and ways to address these issues. We are arranging a meeting with local GPs to update them on our services (especially with respect to the management of agerelated macular degeneration) and how to use them better. However, we will have to continue with the paperbased partial booking system until the electronic system is easier to use and more flexible.

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1 http://www.chooseandbook.nhs.uk.

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Bilateral intraorbital haematomata following thrombolysis for pulmonary embolism

Haemorrhagic complications following systemic thrombolytic treatment are well documented. However, bilateral orbital haematomata following thrombolysis represents an extremely rare complication.

Case report

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A 32-year-old woman presented with sudden onset of dyspnoea 2 weeks after hemiarthroplasty following a fractured neck of femur. The patient was 6 weeks post-caesarean section following an uneventful pregnancy. Her past medical history included asthma and a severe scoliosis. She had no relevant family history.

The patient's condition deteriorated rapidly requiring intubation. Pulmonary embolism was confirmed with a computed tomography pulmonary angiogram (CTPA), intravenous thrombolysis (10000 U Metaplase) given, and the patient transferred to the intensive therapy unit (ITU). After 2 days, the patient was noted to have left-sided chemosis and lid oedema, although pupil responses were normal. Following extubation 6 days later, she described decreased visual acuity and an ophthalmology opinion was sought.

On examination, visual acuity was perception of light in the left eye and 6/9 in the right eye. There was a left relative afferent papillary defect (RAPD) with proptosis of 4 mm and eye movements were moderately reduced superiorly and horizontally with a marked left exotropia. Mild reduction in right eye laevoversion was also noted. Intraocular pressures were 20 mmHg in the right eye and 21 in the left, and both discs were healthy with a cup/ disc ratio of 0.2. No spontaneous venous pulsations were seen.

A computed tomography (CT) scan of the orbits (Figure 1) demonstrated bilateral proptosis secondary to bilateral superior subperiosteal haemorrhages. The subperiosteal haematomata lay superior to the superior recti, which were displaced inferiorly but there was no evidence of optic nerve compression radiologically. The putative cause of the left optic neuropathy was the compression of the optic nerve within the orbit due to an acute haemorrhage following thrombolysis, possibly at the time when the lid oedema and chemosis were first noted. Given that ophthalmic review was 5 days post thrombolysis, the intraocular pressure was normal at this point and there was no evidence of central retinal artery occlusion, it was felt there would be no benefit from surgical decompression. The patient was managed conservatively with a decreasing dose of oral prednisolone starting at 60 mg/day reducing over 2 weeks.

At ophthalmologic review 6 weeks later, the patient had full resolution of proptosis with normal eye movement. Visual acuity had improved to 6/12 in the left eye, although the RAPD persisted.

Comment

Spontaneous intraorbital haemorrhage following thrombolytic therapy remains a rare complication with only limited cases reported.^{1,2} It has been described following anticoagulation associated with endovascular procedures such as coronary artery stenting and intracranial aneurysm coiling³ and even following subcutaneous heparin treatment in two pregnant patients.⁴ Despite its rarity clinicians should be alert to the condition, particularly, in the intensive care setting, in non-conscious patients, and those with other severe comorbidities. The authors believe that this case represents only the second report in the English literature of spontaneous bilateral orbital haematomata following intravenous thrombolysis.⁵



Figure 1 (a–d): Axial (a), coronal (b), oblique (left) (c) and oblique (right) (d), contrast-enhanced CT images through the orbits demonstrating bilateral superior subperiosteal orbital haematomata.

Eye

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Using low dose oral nifedipine to prevent cancellation of cataract surgery for patients with preoperative hypertension

Cancellation of cataract surgery on the day due to raised blood pressure (BP) is a great disappointment for the patient and, unless the slot can be refilled at the last minute, will cost the hospital the difference between the national tariff and the cost of consumables, ie, about £600. Raised BP during intraocular surgery is a risk factor for suprachoroidal haemorrhage and systemic vascular events. Surgeons will reasonably defer cataract surgery, when they consider the BP to be poorly controlled.

At our unit preoperative assessment is carried out by nurses over the telephone to save patients a separate hospital visit. Patients who have not had their BP checked within the preceding 3 months are asked to visit their general practitioner. On the day of surgery, if systolic BP >200 or diastolic >100 mmHg, despite a period of rest, patients under the care of one surgeon (TR) were given nifedipine 5 mg orally regardless of existing treatment (not sublingually), if they denied anxiety. Anxious patients are offered temazapam 10 mg.

Table 1 shows the BP recordings of 17 such patients over 27 months who were given nifedipine. The second reading of patients 4, 13, and 14 in Table 1 were marginally below the above thresholds but were included as nifedipine was still given. Surgery proceeded uneventfully in all 17 cases. These patients were among the 93% of cataract patients at this unit who have surgery without an anaesthetist present, ie, broadly

Table 1	Blood pressure recordings (mmHg) before and 30 min
after oral	(not sublingual) nifedipine 5 mg

Patient	Age	Sex	Pre-treatment 1	Pre-treatment 2	Post-treatment
1	68	М	184/108	186/110	158/92
2	71	F	180/104	184/100	166/82
3	62	F	182/108	178/102	162/90
4	69	F	186/100	188/98	166/86
5	66	Μ	184/116	182/110	158/96
6	76	F	188/112	186/100	168/96
7	85	F	201/104	198/102	145/70
8	62	Μ	200/105	194/103	159/59
9	75	F	195/93	196/108	140/85
10	65	М	173/98	200/98	165/85
11	62	М	170/108	160/105	140/80
12	88	М	204/128	200/120	175/84
13	58	F	174/104	196/97	158/92
14	75	F	200/98	194/69	138/72
15	75	F	202/137	190/100	137/65
16	51	F	180/120	171/106	180/99
17	76	М	220/90	200/90	170/79

those patients who are free of symptoms at rest, no acute vascular events within 3 months and including, for this surgeon, patients unable to lie flat.¹ Full emergency medical support could have arrived within minutes if called. All patients were advised to have their BP treatment reviewed by their general practitioner.

Outside ophthalmology, the use of nifedipine preoperatively is not unusual. Weksler *et al*² showed that intranasal nifedipine (10 mg) was safe to use for this purpose in 589 'controlled' hypertensive patients with diastolic BP between 110 and 130 mmHg immediately before surgery. Swallowed nifedipine must lower BP more gradually and therefore be safer still.

The Royal College of Ophthalmologists guidelines state that hypertension should be controlled before the patient is scheduled for surgery.³ Nevertheless, there will always be poorly controlled patients on the day of surgery. Problems will admittedly be less frequent in eye departments with obligatory preoperative visits, but these have implications of cost and inconvenience. Nifedipine would have saved this hospital over £10000, if these 17 patients had otherwise been cancelled without being replaced.

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