Hence treatment with PBT was recommended. Treatment planning was guided by measurement of tumour dimensions using ultrasonography.

Four fractions of 5310 cGy were given over 4 days. The lesion resolved completely over several months (Figure 1b). The patient remains recurrence free for 2 years as confirmed by serial map biopsies (Figure 1e).

Case 2

An 83-year-old patient was referred with a large limbal lesion encroaching on the cornea (Figure 1f).

Incisional biopsy revealed invasive OSSN (Figures 1h and i).

Treatment with PBT was administered primarily as described above.

Complete resolution at 3 months was found. The patient remains recurrence free at year follow-up.

Comment

The standard treatment for OSSN is surgical excision with safety margin and cryotherapy to the edges.¹ MMC, 5-fluorouracil, interferon,² and radiotherapy (including external beam radiotherapy and brachytherapy)³ have been used as adjuvant treatment with variable success rates.

PBT, a type of external beam radiotherapy, delivers a high dose of ionizing radiation to the tumour with minimal damage to surrounding tissues. It has been used successfully to treat head and neck SCCs,⁴ carcinomas elsewhere,⁵ as well as other ocular tumours (mainly choroidal melanoma).⁶ Only one case is reported in the literature for which PBT was successfully used as primary treatment for invasive OSSN⁷ and we report the first two successful cases in United Kingdom. A case series in which PBT was used for recurrent OSSN or where the surgical margins were involved after excision was published with encouraging results.⁸

In both presented cases, PBT has regressed the tumour without recurrence. Both patients received a 6-week course of topical steroids post treatment. No immediate side effects were noted, however one developed a cataract 2 years later, and the second developed a patch of scleral thinning that was stable on follow-up. We suspect it was an area of deeper tumour invasion that melted away with treatment (Figure 1g).

We believe that PBT should be considered for OSSN when surgical excision is not possible.

Conflict of interest

The authors declare no conflict of interest.

References

- 1 Lee GA, Hirst LW. Ocular surface squamous neoplasia. *Surv Ophthalmol* 1995; **39**: 429–450.
- 2 Basti S, Mascai MS. Ocular surface squamous neoplasia. *Cornea* 2003; **22**(7): 687–704.
- 3 Stannard C, Sauerwein W, Maree G, Lecuona K. Radiotherapy for ocular tumours. *Eye (Lond)* 2013; **27**(2): 119–127.
- 4 Zenda S, Kohno R, Kawashima M, Arahira S, Nishio T, Tahara M *et al.* Proton beam therapy for unresectable malignancies of the nasal cavity and paranasal sinuses. *Int J Radiat Oncol Biol Phys* 2011; **81**(5): 1473–1478.
- 5 Oshiro Y, Mizumoto M, Okumura T, Hashimoto T, Fukumitsu N, Ohkawa A *et al.* Results of proton beam therapy without concurrent chemotherapy for patients with unresectable stage III non-small cell lung cancer. *J Thorac Oncol* 2012; **7**(2): 370–375.
- 6 Fuss M, Loredó LN, Blacharski PA, Grove RI, Slater JD. Proton radiation therapy for medium and large choroidal melanoma: preservation of the eye and its functionality. *Int J Radiat Oncol Biol Phys* 2001; **49**(4): 1053–1059.
- 7 Ramonas KM, Conway RM, Daftari IK, Crawford JB, O'Brien JM. Successful treatment of intraocularly invasive conjunctival squamous cell carcinoma with proton beam therapy. *Arch Ophthalmol* 2006; **124**(1): 126–128.
- 8 Caujolle JP, Maschi C, Chauvel P, Herault J, Gastaud P. Surgery and additional protontherapy for treatment of invasive and recurrent squamous cell carcinomas: technique and preliminary results. *J Fr Ophthalmol* 2009; **32**(10): 707–714.

KS El-Assal¹, SM Salvi², PA Rundle², HS Mudhar³ and IG Rennie⁴

¹Department of Ophthalmology, Royal Hallamshire Hospital, Sheffield, UK

²Sheffield Ocular Oncology Service, Department of Ophthalmology, Royal Hallamshire Hospital, Sheffield UK

³National Specialist Ophthalmic Pathology Service, Royal Hallamshire Hospital, Sheffield, UK

⁴Department of Ophthalmology, Royal Hallamshire Hospital, Sheffield, UK
E-mail: karimelassal@live.com

Eye (2013) **27**, 1223–1224; doi:10.1038/eye.2013.149;
published online 2 August 2013

Sir, Appointment duration in the eye clinic: the same across different subspecialties?

Current trends in the NHS include increased productivity and greater clinic subspecialisation while also being committed to ensuring high-quality patient-centred care.¹ Patients are more likely to be happy with their care if they are satisfied with waiting times, being more likely to comply with advice, improving health outcomes.² With current drives to increase efficiency and subspecialisation of ophthalmology out-patient clinics, there are pressures to define a standard number of patients seen per session. Should it be assumed that the same number of patients can be seen across different subspecialties?

We prospectively assessed appointment duration for 364 consecutive patients (44.8% new referrals) seen by a single doctor (HB) over a 2-month period in a district general hospital setting. We compared the

appointment type (new *vs* follow-up) and four subspecialties: glaucoma, adult general (including post-operative cataracts), paediatric, and adult motility (including neuro-ophthalmology). The face-to-face patient contact time was measured to the nearest second. Results are expressed in minutes as Mean $\pm$ SD. Appointment type was compared using a paired two-tailed *t*-test and subspecialties were compared using ANOVA. The level of significance was taken as $P < 0.05$.

Results are summarised in Table 1. There was a statistically significant difference in appointment duration between new and follow-up appointments ($t = 2.64$, $P < 0.01$) and between adult motility patients compared with the other three subspecialties ($P < 0.01$). When new appointments were compared by subspecialty, adult motility appointments were statistically longer than paediatric and adult general visits ($P < 0.05$). Also, for follow-up appointments, there was a statistical difference between adult glaucoma and adult motility patients ($P < 0.05$).

These data indicate that the mean appointment time does differ between type and subspecialty. There were limitations of our study including the single-doctor nature of the assessment, smaller number of patients seen in certain groups, the limited number of subspecialties, and non-inclusion of time required to scan the notes or dictate letters.

We conclude that appointment duration in the eye clinic is not the same across different ophthalmic subspecialties and should be considered in any outpatient service reconfiguration to ensure the continued quality and safety of patient care.

Table 1 Summary of appointment duration by type and subspecialty in minutes (mean $\pm$ SD)

Type of appointment	n	Mean $\pm$ SD (min)
New	163	14.0 $\pm$ 5.6
Follow-up	201	12.4 $\pm$ 5.7
<i>Subspecialty</i>		
Glaucoma	55	11.2 $\pm$ 5.0
Adult general	53	12.7 $\pm$ 6.2
Paediatric	208	13.0 $\pm$ 5.4
Adult motility	48	16.3 $\pm$ 6.0
<i>New appointments by subspecialty</i>		
Glaucoma	9	15.5 $\pm$ 3.8
Adult general	18	12.4 $\pm$ 6.7
Paediatric	109	13.2 $\pm$ 4.9
Adult motility	27	17.8 $\pm$ 6.5
<i>Follow-up appointments by subspecialty</i>		
Glaucoma	46	10.4 $\pm$ 4.9
Adult general	35	12.8 $\pm$ 6.1
Paediatric	99	12.7 $\pm$ 5.9
Adult motility	21	14.5 $\pm$ 4.8

Conflict of interest

The authors declare no conflict of interest.

References

- 1 High quality care for all NHS next stage review final report. UK Department of Health, 2008, Available at: http://www.ntac.nhs.uk/web/FILES/nhs_1273652272_High_Quality_Care_for_All_2008.pdf.
- 2 Billing K, Newland H, Selva D. Improving patient satisfaction through information provision. *Clin Experiment Ophthalmol* 2007; **35**: 439–447.

RMH Lee and H Bunting

Department of Ophthalmology, Princess Royal University Hospital, Farnborough, UK
E-mail: hbunting@nhs.net

Eye (2013) **27**, 1224–1225; doi:10.1038/eye.2013.152;
published online 12 July 2013

Sir,
Severe bilateral anterior uveitis secondary to giardiasis, initially misdiagnosed as a side effect of metronidazole

Giardiasis is a common worldwide cause of gastroenteritis. We report a case complicated by severe bilateral anterior uveitis, discussing possible mechanisms of ocular involvement.

Case report

A 57-year-old Caucasian female presented with painful visual loss in her left eye. Two weeks previously, she had developed diarrhoea and abdominal pain after returning from India. Microscopy of a stool sample demonstrated cysts of *Giardia lamblia*, but no evidence of *Shigella* spp, *Campylobacter* spp, *Salmonella* spp, or *Escherichia coli* spp. There was no past ophthalmic or other medical history. Oral metronidazole (400 mg t.i.d) was commenced by her general practitioner, but abandoned after she developed blurred vision which was presumed to be a side effect. However, ocular symptoms progressed despite cessation of the drug.

Visual acuity was 6/5 OD, 'count fingers' OS. There was marked AC activity with posterior synechiae, but no fibrin, hypopyon, or iris nodules. Vitritis obscured fundal details and rendered OCT imaging poor, but there was no evidence of cystoid macular oedema or vasculitis. The fellow eye was normal. Other than gastrointestinal upset, there were no systemic features—specifically no rash, arthritis, or conjunctivitis. Acute anterior uveitis was diagnosed and treated with hourly g. dexamethasone and g. cyclopentolate t.i.d. Oral metronidazole was restarted.

Four days later, after the patient had again stopped taking the metronidazole—still concerned it was causing