Table 1 Rheumatological case spread

Diagnosis	No of cases	Cases with uveitis
Oligoarticular JIA	48	8
Polyarticular JIA	46	9
Systemic onset JIA	6	0
Spondyloarthropathy	8	1
Psoriatic arthritis	6	1
Idiopathic uveitis	5	5
Other	11	0
Total	130	24

JIA, juvenile rheumatoid arthritis.

which has now been operating for 3 years, has recently been undertaken.

Of 130 children reviewed jointly, 24 were found to have uveitis either at presentation or at subsequent follow-up (table 1). From this, we estimate the prevalence of paediatric uveitis in Lothian to be about 5/100 000, which is similar to that reported previously in the UK.³

The first year after the onset of the arthritis is the most critical time for screening for uveitis; all of our patients who develop uveitis did so during this time period (table 2). It is, however, well recognised that uveitis may develop many years after the onset of arthritis. Table 2 shows the average age of onset of JIA-related uveitis in our population.

Children <6 years of age are often cognitively unaware of painless visual loss. Of the 17 children who had a diagnosis of oligoarticular or polyarticular JIA, only two were symptomatic and six had active uveitis at their first examination.

We believe that had this joint service not been in operation, a proportion of these cases of asymptomatic uveitis may probably have been diagnosed late, or may have been treated inadequately. Children with JIA often attend multiple paediatric subspecialties for management of debilitating disease. Before the introduction of the Children's Hospital-based clinic, the non-attendance rate for ophthalmological screening was high. The present system is convenient and effective for both patients and practitioners, allowing comanagement of ocular and joint disease. The expertise of the rheumatologist in the use of novel immunosuppressant treatments is invaluable to the ophthalmologist. The establishment of this clinic has improved the clinical quality and efficiency of the screening and treatment service for children with joint disease.

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References

- 1 Cassidy J, Kivlin J, Lindsley C, *et al*. The Section on Rheumatology and the Section on Ophthalmology. Ophthalmological examinations in children with juvenile rheumatoid arthritis. *Pediatrics* 2006;**117**:1843–5.
- 2 Kump LJ, Cervantes-Casteneda RA, Androudi SN, *et al*. Analysis of pediatric uveitis cases at a tertiary referral center. *Ophthalmology* 2005;**112**:1287–92.
- 3 Edelsten C, Reddy A, Stanford MR, *et al*. Visual loss associated with pediatric uveitis in English primary referral centers. *Am J Ophthalmol* 1993;**135**:676–80.

Buckle, no cryo: scleral buckle with no cryotherapy for retinal detachment secondary to commotio retinae

Two cases of retinal detachment in commotio retinae are presented. Both had a successful outcome with scleral buckling alone, without subretinal fluid drainage or retinopexy.

A 22-year-old man was referred to our unit 2 days after blunt trauma to his right eye. On examination, his visual acuities were 6/9 and 6/6 in the right and left eyes, respectively. Abnormal findings included mild right traumatic uveitis, a mild right vitreous haemorrhage, and a large area of superotemporal commotio retinae in the detached retina, and no posterior vitreous detachment. This was associated with a large peripheral retinal tear, extending from 10:00 to 12:00 h. As signs of progression were noted while the macula remained attached, the patient underwent scleral buckling surgery with a type 277 scleral buckle. To prevent further inflammation and breakdown of the blood–retinal barrier, neither cryotherapy nor subretinal fluid drainage was performed. The next day, the retina was attached and the break was well supported on the buckle. One month later, the retina remained attached, with resolution of the vitreous haemorrhage. The area over the scleral indent had developed a spontaneous chorioretinal scar, identical to a retinopexy lesion (fig 1).

A 21-year-old man presented after a blunt injury to his left eye by a football. On examination, his visual acuity was 6/6 in both eyes. He had mild anterior uveitis and a stable lens. Funduscopy showed a superotemporal retinal dialysis (fig 2), extending from 12:00 to 15:00 h, with an associated “bucket-handle” avulsion of the vitreous base from 13:00 to 14:00 h. Marked commotio retinae with multiple scattered retinal haemorrhages and mild inferior vitreous

Figure 1 Colour fundus photograph of the right eye 1 month after surgery, showing a good indent with an overlying chorioretinal scar.

Figure 2 Colour fundus photograph of the left eye showing a superotemporal retinal detachment in commotio retinae.

haemorrhage was observed. Over 3 days, there was progression of the retinal detachment. The dialysis was therefore repaired with a 5-mm diameter cylindrical sponge circumferential explant extending from 11:00 to 16:00 h, without cryotherapy or subretinal fluid drainage to prevent excessive blood–ocular barrier breakdown and inflammation.

Postoperatively the retina remained attached, with the dialysis supported on the indent, with development of a good chorioretinal scar (fig 3). The avulsed portion of the vitreous base was clear of the dialysis.

In both patients, postoperative recovery was unremarkable, with normal intraocular pressures throughout and recovery of vision to 6/9 in the affected eye.

Comment

Successful retinal reattachment surgery relies on identification and closure of all retinal breaks along with the creation of a chorioretinal adhesion to prevent further recruitment of subretinal fluid. Cryotherapy has been used

Figure 3 Colour fundus photograph of the left eye 1 month after surgery, showing a good indent with an overlying chorioretinal scar.

Table 2 Age and timing of onset of uveitis in juvenile rheumatoid arthritis

	Months between onset of arthritis and uveitis (months)	Mean age of onset of uveitis (range, years)
Oligoarticular JIA	2–10	6 (2.6–8.8)
Polyarticular JIA	4–6	4.7 (1.7–11.8)

JIA, juvenile rheumatoid arthritis.

in retinal detachment surgery to create such chorioretinal adhesions.¹ However, cryotherapy can cause changes in the blood-retinal barrier and promote the development of cystoid macular oedema, macular pucker and proliferative vitreoretinopathy.²⁻⁵ Histopathological findings in human eyes with commotio retinae show disruption of the photoreceptor outer segment and damage to the retinal pigment epithelium.⁶ Therefore, applying cryotherapy to detached retina with pre-existing commotio retinae may have induced further retinal damage and led to poor outcome owing to formation of epiretinal membranes, proliferative vitreoretinopathy or cystoid macular oedema.

Previous studies have shown that scleral buckling surgery can be successful without the use of retinopexy.⁷ The detection and closure of retinal breaks allows the retinal pigment epithelium to pump the subretinal space dry, and closure of these breaks prevents further recruitment of subretinal fluid. However, without a permanent chorioretinal scar, if buckle removal or failure occurs even years later, reopening of retinal breaks leads to recurrent retinal detachment. Thus, retinopexy is performed in most retinal detachment operations.

In both of these patients, no retinopexy was applied. It was assumed that the retinal changes induced in severe commotio retinae⁶ would allow the injured retina to adhere to underlying altered retinal pigment epithelium and thereby allow the formation of a chorioretinal scar. This approach resulted in a successful closure of all breaks and retinal reattachment, with subsequent formation of a good chorioretinal scar (fig 1) and to date, a good outcome in both patients.

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References

- 1 **Veckeneer M**, Van Overdam K, Bouwens D, *et al*. Randomised clinical trial of cryotherapy versus laser photocoagulation for retinopexy in

conventional retinal detachment surgery. *Am J Ophthalmol* 2001;**132**:343.

- 2 **Jaccoma EH**, Conway BP, Campochiaro PA. Cryotherapy causes extensive breakdown of the blood-retinal barrier. A comparison with argon laser photocoagulation. *Arch Ophthalmol* 1985;**103**:1728-30.
- 3 **Kimball RW**, Morse PH, Benson WE. Cystoid macular edema after cryotherapy. *Am J Ophthalmol* 1978;**86**:572-3.
- 4 **Lobes LA Jr**, Burton TC. The incidence of macular pucker after retinal detachment surgery. *Am J Ophthalmol* 1978;**85**:72-7.
- 5 **Cowley M**, Conway BP, Campochiaro PA, *et al*. Clinical risk factors for proliferative vitreoretinopathy. *Arch Ophthalmol* 1989;**107**:1147-51.
- 6 **Mansour AM**, Green WR, Hogge C. Histopathology of commotio retinae. *Retina* 1992;**12**:24-8.
- 7 **Chignell AH**. Retinal detachment surgery without cryotherapy. *Trans Ophthalmol Soc UK* 1977;**1**:30-2.

NOTICES

Back of the eye

The latest issue of *Community Eye Health* (No 58) discusses linking people with eye care in outreach clinics. For further information please contact: Journal of Community Eye Health, International Resource Centre, International Centre for Eye Health, Department of Infectious and Tropical Diseases, London School of Hygiene and Tropical Medicine, Keppel Street, London WC1E 7HT, UK (tel: +44 (0)20 7612 7964; email: Anita.Shah@lshtm.ac.uk; online edition: www.jceh.co.uk). Annual subscription (4 issues) UK £28/US\$45. Free to developing country applicants.

Delivering the vision innovations from the eyecare pathways

Delegates are invited to Delivering the Vision, a major conference exhibition event focusing on the future of eye care in England and Wales on 17-18 January 2007 at York Racecourse. This two day event is hosted by the Department for Health and Royal National Institute of the Blind and will showcase the findings from the pilot stage of the NHS Eyecare Services Programme. For booking and further information please visit the website www.nib.org.uk/deliveringthevision.

The ISA fellowship awards

The International Strabismological Association (ISA) has established two fellowship awards for either basic or advanced training in strabismus/pediatric ophthalmology supported in the amount of \$10,000 US. For full information and an application form, see www.ISAhome.org or contact the Secretary/Treasurer of the ISA, Derek T Sprunger, MD at Indiana University School of Medicine, 702 Rotary Circle, Indianapolis, Indiana 46202, USA, or by email: isa.ims@juno.com. Closing date for applications is 31 March 2007.

8th EUNOS Meeting – 2007

The 2007 European Neuro-ophthalmology Society meeting (EUNOS; www.eunos.web.org) will be taking place in Istanbul, Turkey on 26-29th May 2007. For further information please visit www.eunos2007.org or contact Pinar Aydin aydinp@eunos2007.org

9th IOIS International symposium

The 9th International ocular Inflammation Society international symposium will be held in Paris from 17-20th September 2007. For further information on registration please call +33 (0)1 70 08 69 82, or fax +33 (0)1 42 93 29 28, or email andrelamy1@wanadoo.fr. Or you can visit the website www.iois-paris-2007.com.

IAPB 8th General Assembly – 2008

The 2008 International Agency for the Prevention of Blindness Eighth General Assembly: 'Excellence and Equity in Eye Care' will be taking place at the Centro de Convenções Rebouças, in Sao Paulo, Brazil on 28th July-2nd August. For further information please email: agency@lvpei.org.

Teaching courses on Retinal and Vitreous Surgery

Several teaching courses on Retinal and Vitreous Surgery have been organised throughout 2006 and 2007 around the world in association with the International Faculty. For further information on each of these courses please contact Ingrid Kressig, Univ.-Augenklinik Theodor-Kutzer-Ufer 1-3, 68164 Mannheim, Germany; email: Ingrid.kressig@augen.ma.uni-heidelberg.de; website: <http://kressig.uni-hd.de/>.