

CORRESPONDENCE

High prevalence of lactose absorbers in patients with presenile cataract from northern Sardinia

EDITOR,—An elevated incidence of cataract has been observed by Simoons *et al* in high milk drinking populations.¹ Other authors^{2,4} found that the percentage of lactose absorbers among subjects with cataract was higher than in the normal population. We studied 40 adult male subjects with cataract (they were aged less than 56 years and more than 44 years), and 50 healthy similarly aged control males from northern Sardinia. Milk drinking habits were similar for the two groups. None of the patients was affected by cataract dueto congenital, inflammatory, iatrogenic, diabetic, traumatic factors, or other causes. Thirty five of the 40 cataractous subjects had bilateral cataract, 23 of whom had nuclear, seven cortical posterior, six coronary, two posterior polar, and two zonular cataract. All the subjects were given a 50 g oral load of lactose as a 15% water solution; the hydrogen breath concentration in the expired air was measured in each subject before the lactose oral load and at 30 minute intervals for the next 4 hours using a Quintron 121 gas chromatograph. Lactose malabsorption was diagnosed if the maximum increase in hydrogen in the expired air was more than 20 parts per million.⁵ Only seven (14%) of the 50 normal subjects were lactose absorbers compared with 16 (40%) of the 40 cataractous subjects. The χ^2 test revealed a significant difference ($p=0.01$) in the frequencies of the two groups. One fact that must be emphasised is that all the lactose absorber cataractous patients had bilateral nuclear cataract; the difference between the frequency of this subgroup and the control group is highly statistically significant. These results confirm that in our region (northern Sardinia), characterised by high milk drinking habits, adult lactose absorbers are more prone to develop presenile cataract than non-lactose absorbing individuals.

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- 1 Simoons FJ. A geographic approach to senile cataracts: possible links with milk consumption, lactase activity and galactose metabolism. *Dig Dis Sci* 1982; 27: 257-64.
- 2 Rinaldi E, Albini L, Costagliola C, De Rosa G, Auricchio G, De Visia B, *et al*. High frequency of lactose absorbers among adults with idiopathic senile and presenile cataract in a population with a high prevalence of primary adult lactose malabsorption. *Lancet* 1984; i: 355-7.
- 3 Spinelli D, Vota MG, Formenti F, Accetta S, Careddu P, Roggero P, *et al*. Idiopathic presenile and senile cataract formation and changes in lactase activity. *Fortschr Ophthalmol* 1987; 84: 666-8.
- 4 Birlouez-Aragón I, Stevenin L, Rouzier C, Brivet M. Consumption de lactose et activité lactasique: deux facteurs de risque de la cataracte sénile et diabétique. *Age/Nutrition* 1990; 1: 74-9.

5 Semenza G, Auricchio S. Small-intestinal disaccharidases. In: Scriver C, Beaudet A, Sly W, Vall D, eds. *The metabolic bases of inherited disease*. 6th ed. New York: McGraw-Hill, 1989; vol 2: 2975-97.

In defence of goniotomy

EDITOR,—O'Connor's editorial states that 'primary trabeculectomy has replaced goniotomy as the preferred surgical treatment for congenital glaucoma'.¹ To support this statement he cites Burke and Bowell's report of an 87% success rate for primary trabeculectomy based on 13 eyes with primary infantile glaucoma and a mean follow up of 3.9 years.² Rice has reported an 86% success rate (211/246 eyes) for goniotomy for eyes with primary infantile glaucoma which in the majority (73%) of cases only required a single procedure.³ We reported a large long term follow up study of Rice and Lister's patients with trabeculodysgenesis (339 eyes) in which we showed that 92% of eyes controlled in infancy by goniotomy were still controlled after 5 years of follow up; however, Kaplan-Meier actuarial survival curves demonstrate that there is a risk of relapse throughout life.⁴ The risk of relapse in eyes having undergone trabeculectomy in childhood is significant especially if antiproliferative agents are not used.⁵ The advantage of a primary goniotomy is that the conjunctiva is preserved for any future drainage surgery. For individual children, if they are to have a drainage operation, it will be when they are older and young age is a significant negative factor in bleb survival. Also there will hopefully have been advances in both surgical techniques and in agents used to improve bleb survival.

O'Connor also cites Miller and Rice⁵ as advocating primary trabeculectomy. This appears to be a misquote as their paper reports trabeculectomy being performed in eyes with relapse or failure of control of congenital glaucoma after goniotomy or trabeculectomy.

My remarks refer entirely to eyes with typical primary congenital glaucoma (trabeculodysgenesis using the Hoskins classification⁶), which is the commonest form of congenital glaucoma seen in the UK and to the results for a surgeon experienced in the technique of goniotomy. Examination of the angle is crucial when planning the surgical approach. Goniotomy should never be performed without a view of the angle. However, a view of the angle can be usually achieved by removal of the corneal epithelium. O'Connor states that goniotomy cannot be performed in approximately 50% of cases of congenital glaucoma because of corneal opacity. However, we found that in addition to the 211 patients reported in our study to have been treated by primary goniotomy, only a further 20 patients (<10%) with trabeculodysgenesis were seen during the same time but were excluded from our paper as the initial surgery was not goniotomy. In most of these cases a primary trabeculectomy was performed as an adequate view of the angle could not be achieved because of corneal clouding. Trabeculectomy can be performed at a temporal, or even inferior, site to preserve the superior bulbar conjunctiva. The congenital glaucoma which occurs in Middle Eastern countries is more often familial than it is in the West⁷ and may respond less well to goniotomy. Often there is a more extensive angle anomaly (personal observation). I note that Elder's paper in the same issue of the *BJO* relates to his experience in Jerusalem.⁸ It

may be that in this population and in eyes with iridotrabeculodysgenesis with infantile onset glaucoma, combined trabeculectomy-trabeculectomy may be a useful operation. I, therefore, read his paper with interest and look forward to him reporting a longer follow up.

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- 2 Burke JP, Bowell R. Primary trabeculectomy in congenital glaucoma. *Br J Ophthalmol* 1989; 73: 186-90.
- 3 Rice NSC. The surgical management of congenital glaucomas. *Aust J Ophthalmol* 1977; 5: 174-9.
- 4 Russell-Eggitt IM, Rice NSC, Barrie J, Wyse RKH. The relapse rate following surgery for trabecular dysgenesis. *Eye* 1992; 6: 197-200.
- 5 Miller MH, Rice NSC. Trabeculectomy combined with β radiation for congenital glaucoma. *Br J Ophthalmol* 1991; 75: 584-90.
- 6 Hoskins HD Jr, Shaffer RN, Hetherington J. Anatomical classification of the developmental glaucomas. *Arch Ophthalmol* 1984; 102: 1331-6.
- 7 Jaafar MS. Care of the infantile glaucoma patient. *Ophthalmology annual*. New York: Raven Press, 1988; 7: 15-37.
- 8 Elder MJ. Combined trabeculectomy-trabeculectomy compared with primary trabeculectomy for congenital glaucoma. *Br J Ophthalmol* 1994; 78: 745-8.

Adjustable sutures in eyelid surgery

EDITOR,—I would like to comment on the article by J R O Collin and E A O'Donnell.¹ In that article, they state that their technique of postoperative adjustment of lid height is new. Work I have done shows that the adjustable suture technique was introduced in 1982 and has been used with modifications for 12 years.²

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- 1 Collin JRO, O'Donnell BA. Adjustable sutures in eyelid surgery for ptosis and lid retraction. *Br J Ophthalmol* 1994; 78: 167-74.
- 2 Small RG. Upper eyelid retraction in Graves' ophthalmopathy: a new surgical technique and a study of the abnormal levator muscle. *Trans Am Ophthalmol Soc* 1988; 86: 725-93.

Reply

EDITOR,—In 1982, Small used a posterior approach technique to excise Muller's muscle and recess the aponeurosis with two monofilament polypropylene mattress sutures passed through the skin for later adjustment. In 1988 he modified the technique to an anterior approach, cut the levator muscle above Whitnall's ligament and held it recessed with a 6/0 monofilament polypropylene mattress suture brought through the skin. The suture is adjusted if necessary immediately after recovery from anaesthesia but by bringing the suture through a rubber cylinder cut from the edge of a surgical glove, the adjustment can be modified during the first postoperative week before finally tying the suture.

His paper shows some very impressive results and our recent paper confirms that adjustable sutures are very effective in treating lid retraction. We recess Muller's muscle with the aponeurosis and the levator muscle via an anterior approach and maintain the