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Sir,

Preschool vision filtering and amblyopia

We read with interest your articles by Searle *et al*[1] and Gregson,[2] with respect to amblyopia treatment and compliance. We appreciate that there is a need to improve compliance and 'self-efficacy' with respect to patching. In Searle *et al*'s study population, the mean visual acuity at first assessment was 6/24, which he had alluded to as being severe, substantial visual loss. Further, preschool children with amblyopia have been shown to be at risk for further deterioration.[3] For these reasons, we feel it is important to detect amblyopia early.

Recent UK guidelines[4] have advised that all children be screened before 5 years of age. The French Health Authorities have instituted offering vision screening at 9 months to all infants, as they found that at 9 months, infants were more responsive to the acuity card procedure; further they complied more easily with orthoptic and ophthalmic examination than at a later age. In addition to this, occlusive treatment before 1 year of age has been shown to be more acceptable, with better compliance and a shorter occlusion period, making it more efficient.[5]

Compliance has been stated to be the most critical factor for predicting a successful outcome[6] with parental nonconcordance and response efficacy having a negative impact.[1,7] Searle *et al* argue that the decision to postpone screening until 5 years of age may be premature in the light of poor compliance and not a result of ineffective treatment. Can we achieve better compliance by early recognition and parental education? It is interesting to note that in the same study, 73% of the children had a family history of amblyopia.

Since 1989, Coventry has an effective preschool vision filtering programme. It allows for opportunistic assessment or self-referral to a community orthoptist. The attendance rate averages 70%. In all, 880 children are screened annually in the programme. Approximately 20% of children screened are identified as strabismic or anisometropic amblyopes and referred for further assessment to the Paediatric Eye Clinic. Other ocular pathology identified included epiphora (2.7%), nystagmus (1.1%), and an abnormal red reflex (0.8%).[8]

We contend that the benefits of preschool filtering should not be overlooked as a valuable aspect of the future provision of children's eye services. While it is important to treat amblyopia effectively, it is also important to detect it early. Besides amblyopia, decreased vision due to refractive errors, strabismus or ocular pathology must be included in any analysis of the cost effectiveness of preschool vision filtering. Where existing effective pre-school programmes exist, these should not be replaced with the year-5 screening programme; they should run together for the benefit of all young children and not just those of school age.

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Sir,

Reply to preschool vision filtering and amblyopia

We agree with Mowatt *et al* that compliance with occlusion is often better in younger children. Although vision testing at school entry is easier, coverage is higher, and treatment of amblyopia is still