

CORRESPONDENCE

MYDRIASIS AND CYCLOPLEGIA

To the Editorial Committee of the BRITISH JOURNAL OF OPHTHALMOLOGY

SIRS,—Those who have read Cowan and Archer's recent article on "The clinical evaluation of a new mydriatic—Mydrilate" may like to be referred to a most useful contribution to the *Lancet*, by Sorsby, Sheridan, Moores, and Haythorne (1955), which many of us seem to have missed.

In that article it was made clear how very effective a cycloplegic we have in *dilute* solutions of hyoscine hydrobromide, which are free from the risk of severe intoxication associated with the 0.5 per cent. or even the B.P. strength formerly considered necessary.

Since reading that article I have used hyoscine hydrobromide 0.1 per cent. instead of atropine or homatropine and cocaine for refraction work in infants and children, and have found

- (1) These hyoscine drops are obviously less irritant than either atropine 1 per cent. or homatropine and cocaine. Consequently, the nurse or parent finds them easier to instill, and one has encountered fewer cases of residual accommodation.
- (2) Hyoscine cycloplegia, though as complete as that due to atropine, is easily overcome by eserine.
- (3) School work and orthoptic treatment are interrupted for barely 48 hours, which is almost as kind to the patient as the use of homatropine and cocaine, and much kinder than the use of atropine.
- (4) Maximal cycloplegia lasts for an adequate time (6 hours is reported), which is far more reliable than the period of 20 minutes reported for "Mydrilate", and mydriasis lasts for some 48 hours.

In view of (2) above, I avoid using atropine in hospital or in the out-patients department whenever there is a possibility of rise in tension, and employ hyoscine 0.1 per cent. instead. It is just as good and administration three times daily is usually adequate. I would suggest that (2) is a fact of very considerable therapeutic importance, worthy of wider recognition.

I have several times used hyoscine 1 in 5000 without ill effects in cases known or believed to be sensitive to "atropine and hyoscine"; at 1 in 8000 it has eased symptoms in blind eyes with smouldering uveitis. I am inclined to think that dilute hyoscine may be less liable than 1 per cent. atropine to cause sensitization in cases undergoing prolonged treatment.

For reliable *partial* mydriasis in elderly patients unsuited to operation, a daily drop of 1 in 4000 hyoscine has been found very good in mitigating the effects of lens opacities.

Rapid mydriasis seems to call for "Mydrilate", but for reliability in refraction work (and for economy also) I think we must give first place to hyoscine.

Yours faithfully,

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REFERENCES

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SORSBY, A., SHERIDAN, M., MOORES, N., and HAYTHORNE, J. (1955). *Lancet*, 2, 214.