

effect; the mechanism of this is unknown but is associated with prolongation of the QT interval.<sup>3</sup>

There is little doubt that in the two cases reported here amiodarone exerted an antiarrhythmic effect within a few hours of the first oral dose. Possibly previous treatment with other antiarrhythmic agents had in some way sensitised the myocardium to the effects of amiodarone. The prolongation of the QT interval suggests that in our patients oral amiodarone produced an acute pharmacological effect similar to that seen after intravenous administration.

Our observations cannot be explained on the basis of current knowledge of the pharmacokinetics of oral amiodarone and highlight the need for further investigation of its mode of action.

- <sup>1</sup> Rosenbaum MB, Chiale PA, Halpern MS, *et al.* Clinical efficacy of amiodarone as an antiarrhythmic agent. *Am J Cardiol* 1976;**38**:934-44.
- <sup>2</sup> Vaughan Williams EM. The discovery of the anti-arrhythmic action of amiodarone. In: *Amiodarone in cardiac arrhythmias*. London: Royal Society of Medicine, 1978:1-11. (*International Congress and Symposium Series*, No 16.)
- <sup>3</sup> Marcus FI, Fontaine GH, Frank R, Grosogeat Y. Clinical pharmacology and therapeutic applications of the antiarrhythmic agent, amiodarone. *Am Heart J* 1981;**101**:480-93.

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## Residual amblyopia in recruits to the British Army

Unilateral amblyopia is a common condition, the incidence varying between 1% and 5% depending on the population studied. Downing<sup>1</sup> found unocular amblyopia of 6/12 or worse on the Snellen chart in 3.2% of military "selectees." Cole<sup>2</sup> reported the prevalence of amblyopia in his clinical sample as 5.3%, while Flom and Neumaier<sup>3</sup> reported a prevalence in children of 1%.

We carried out a study to determine whether the prevalence or depth of amblyopia in adult recruits to the British Army had fallen since the advent of intensive screening and treatment of visual defects in children.

### Subjects, methods, and results

We selected a 20% random sample of recruits' medical records for the years 1965 and 1976, these being the years most separate on Army computer records. Records of visual acuity for each eye, corrected and uncorrected, were extracted for all recruits accepted for service. Potential recruits with appreciable ocular disease are not accepted for service and so were not included. Amblyopia was defined as a difference in the best recorded visual acuity between the two eyes of two or more lines on the Snellen chart, the better eye having at worst 6/9 acuity. The table summarises the results.

The results for 1965 indicated a tendency for the left eye to be the weaker of the two, but this difference was not significant and was not apparent in 1976. The prevalence of amblyopia decreased between 1965 and 1976 in both men and women, but the difference was not significant for the men and for the women was just significant in a one-sided test ( $p < 0.05$ ). Combining the two years' results gave a mean prevalence of 0.044% (with 95% confidence limits 0.035% and 0.053%) in the men and 0.046% (confidence limits 0.031% and 0.061%) in the women. There was no significant difference in the prevalence between the men and women.

Prevalence and depth of amblyopia in military recruits in 1965 and 1976

	Men		Women	
	1965	1976	1965	1976
Total No in sample	4000	3746	499	325
No (%) with amblyopia	188 (4.7)	153 (4.1)	28 (5.6)	10 (3.1)
No (%) with two-line difference	88 (46.8)	66 (43.1)	10 (35.7)	5 (50.0)
No (%) with more than two-line difference	100 (53.2)	87 (56.9)	18 (64.3)	5 (50.0)
No (%) with left eye weaker	109 (58.0)	77 (50.3)	15 (53.6)	1 (10.0)

### Comment

In this survey all subjects were aged under 30. All were volunteers for military service and needed to produce the best visual acuity possible to gain acceptance. Some with appreciable ocular disease may have been included, but the screening process ensures that these are few. Other studies of amblyopia in military personnel<sup>1</sup> have been criticised on the grounds that the prevalence of amblyopia was artificially high because of malingering or ocular hysteria in conscripts faced with compulsory service.<sup>3,4</sup> In this study the reverse is more likely, with the recorded visual acuity possibly being better than the true visual acuity, such is the motivation of non-conscripted recruits.

The sample in the survey was not particularly representative of the adult population at large since most recruits come from social classes IV and V; such people are probably more likely to have amblyopia that has not been detected and treated than people in higher social classes.

We conclude that the prevalence and depth of amblyopia in voluntary recruits to the British Army have remained the same over the years. It appears that the "final" visual acuity in the amblyopic eye of recruits born around 1959 is the same as that in recruits born around 1947 or indeed in the 1920s. Postwar efforts to detect and treat amblyopia in children seem to have produced no measurable decrease in the proportion of the adult population with "lazy eye."

- <sup>1</sup> Downing AH. Ocular defects in 60,000 selectees. *Arch Ophthalmol* 1945; **33**:137-43.
- <sup>2</sup> Cole RBW. The problem of unilateral amblyopia. *Br Med J* 1959;*i*:202-6.
- <sup>3</sup> Flom MC, Neumaier RW. Prevalence of amblyopia. *Am J Optom Physiol Opt* 1966;**43**:732-51.
- <sup>4</sup> Flom MC, Kerr KE. Amblyopia: a hidden threat? *J Am Optom Assoc* 1965;**36**:906-11.

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QUEEN OF THE MEADOWS, MEADOW SWEET, OR MEAD SWEET. The stalks of these are reddish, rising to be three feet high, sometimes four or five feet, having at the joints thereof large winged leaves, standing one above another at distances, consisting of many and somewhat broad leaves, set on each side of a middle rib, being hard, rough, or rugged, crumpled much like unto elm leaves, having also some smaller leaves with them (as Agrimony hath) somewhat deeply dented about the edges, of a sad green colour on the upper side, and greyish underneath, of a pretty sharp scent and taste, somewhat like unto the Burnet, and a leaf hereof put into a cup of claret wine, gives also a fine relish to it. At the tops of the stalks and branches stand many tufts of small white flowers thrust thick together, which smell much sweeter than the leaves; and in their places, being fallen, come crooked and cornered seed. The root is somewhat woody, and blackish on the outside, and brownish within, with divers great strings, and lesser fibres set thereat, of a strong scent, but nothing so pleasant as the flowers and leaves, and perishes not, but abides many years, shooting forth a-new every Spring.

It grows in moist meadows that lie mostly wet, or near the courses of water. It flowers in some places or other all the three Summer months, that is, June, July, and August, and the seed is ripe soon after.

Venus claims dominion over the herb. It is used to stay all manner of bleedings, fluxes, vomitings, and women's courses, also their whites: It is said to alter and take away the fits of the quartan agues, and to make a merry heart, for which purpose some use the flowers, and some the leaves. It helps speedily those that are troubled with the cholic; being boiled in wine, and with a little honey, taken warm, it opens the belly; but boiled in red wine, and drank, it stays the flux of the belly. Outwardly applied, it helps old ulcers that are cankerous, or hollow fistulous, for which it is by many much commended, as also for the sores in the mouth or secret parts. The leaves when they are full grown, being laid on the skin, will, in a short time, raise blisters thereon, as Tragus saith. The water thereof helps the heat and inflammation in the eyes. (Nicholas Culpeper (1616-54) *The Complete Herbal*, 1850.)