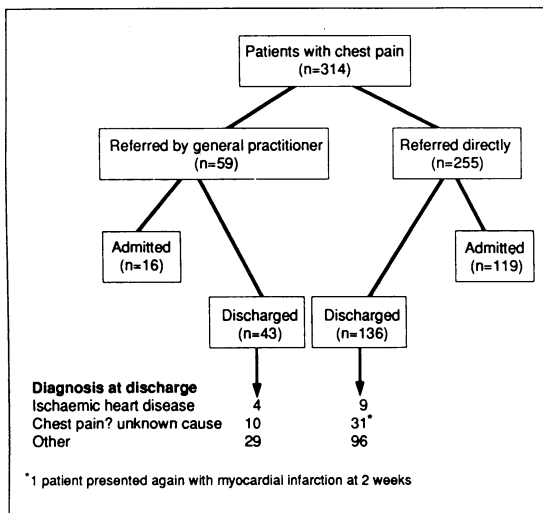


Outcome of 314 patients with chest pain



Colquhoun showed that only 28% of general practitioners have access to electrocardiographs in surgery hours and only 16% outside these hours.<sup>2</sup> "Chest pain ?cause" is a well recognised entity,<sup>3</sup> and casualty officers should not be forced always to make a firm diagnosis; no definite diagnosis was made in 41 of our discharged patients.

The mean age of our patients in whom an error was deemed to have been made was 56. We suggest that all patients over 50 with chest pain should have electro-

cardiography. This study suggests that this would mean an extra 50 tests a year in a department seeing 50 000 patients annually. The low error rate in our study was encouraging, particularly as an American study found that 35% of discharged patients continued to have pain at two weeks<sup>4</sup>; this compares with 15% (26/179) of our patients. We attribute our good results to intensive training.<sup>5</sup>

Accident and emergency departments would be the most appropriate place to assess patients with chest pain. Cardiology departments would be overrun if they had an open access policy, and many general practitioners do not have the facilities to confirm their clinical diagnosis. Patients with chest pain should be advised to attend their local accident and emergency department without delay. Discharged patients who continue to have chest pain at two weeks should see their general practitioner or return to the accident and emergency department.

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## Changes in sexual behaviour in a large cohort of homosexual men in England and Wales, 1988-9

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The uptake of safer sexual practices by homosexually active men in the light of AIDS<sup>1</sup> has led to downward revisions of the predicted spread of HIV<sup>2</sup> and a decline in the prevalence of rectal gonorrhoea and other sexually transmitted diseases.<sup>3</sup> We report a reversal of this trend in 1988-9 in terms of the proportion of men engaging in anal intercourse and the numbers of partners with whom it occurred.

### Subjects, methods, and results

As part of a prospective study of the prevalence of HIV infection and sexual behaviour of homosexually active men,<sup>4,5</sup> 691 men (261 in London, 430 in nine other cities) were recruited (a) through their responding to a postal questionnaire in the gay press; (b) from gay pubs, clubs, and social and political organisations; and (c) from contacts of men recruited by the two methods. None came from genitourinary medicine clinics. The representativeness of the cohort is impossible to assess without a denominator study. The cohort includes, however, a substantial proportion of men who do not attend genitourinary medicine clinics, who may be presumed to be more sexually active and have substantially lower rates of HIV infection than clinic attenders.<sup>4</sup> Thus our results may be more representative of homosexually active men than clinic based studies.

Respondents were interviewed in 1988 and again in 1989; the median time between interviews was 10

months. A sexual partner was defined as anyone with whom there was sexual contact with the intention of producing orgasm for one or both partners and a penetrative sexual partner as someone with whom the respondent had engaged in anal intercourse. Data were assessed with McNemar's test for categorical data and the Wilcoxon matched pairs signed ranks test for continuous data.

The table shows the demographic characteristics of the cohort, most of whom were white and identified themselves as gay. Between 1988 and 1989 the proportion of men engaging in insertive anal intercourse increased from 28% (191) to 32% (222) ( $\chi^2=21.9$ ,  $df=2$ ,  $p<0.01$ ) and for receptive anal intercourse from 28% (191) to 29% (199) ( $\chi^2=48.6$ ,  $df=2$ ,  $p<0.01$ ). The prevalence of anal intercourse (insertive or receptive) in the two years was 56.6% (391/691), but the proportion who reported engaging in anal intercourse in both interviews was 27.4% (189).

The proportion of the cohort with a regular sexual relationship increased from 57.2% (395) to 64.4% (445), but this was not accompanied by an increase in monogamy, the reported numbers of male sexual partners in the previous year increasing concurrently

*Demographic characteristics of homosexual men interviewed in 1988 and 1989. Values are numbers of men (n=691) unless stated otherwise*

Characteristic	
Age (years):	
Median	30
Mean	33
Range	15-81
Marital state:	
Single	602
Married	33
Separated, divorced, or widowed	56
Educational:	
O levels or less	209
A levels and equivalent	211
Degree or more	271
STD clinic attendance:	
Non-attender	477
Regular attender	214

STD=sexually transmitted disease.

from a mean of 11.6 (median 4) in 1988 to 15.6 (5) in 1989 ( $T=3.83$ ,  $p<<0.001$ ). The numbers of partners in the month before interview also significantly increased from a mean of 2.1 (median 1) to 2.2 (1) ( $T=2.03$ ,  $p<0.05$ ).

More importantly from the point of view of HIV transmission the mean number of penetrative sexual partners in the previous year rose from 2.2 (median 1) to 2.5 (1) and in the previous month from 0.5 (0) to 0.6 (0), though neither increase was significant. The proportion of partners with whom anal penetration occurred was, however, significantly lower for the monthly estimates (0.37 compared with 0.52;  $T=17.12$ ,  $p<<0.001$ ) and for the previous year (0.31 compared with 0.34;  $T=21.63$ ,  $p<<0.001$ ).

### Comment

The proportion of men in the cohort engaging in anal intercourse increased between 1988 and 1989. Anal intercourse seemed to be an infrequent occurrence

for a comparatively large number of them and not restricted to a small group who had yet to adopt or who had abandoned practising safer sex.

Although men had anal intercourse with a smaller proportion of their sexual partners, the number of partners increased, thus increasing the number of risk encounters. These findings lead us to predict a rise in HIV infections and marker diseases such as rectal gonorrhoea.

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## Corneal deposits associated with flecainide

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Flecainide is a potent antiarrhythmic drug (class IC) for the treatment of ventricular and supraventricular tachycardias. Recently, proarrhythmic events and sudden death, in addition to milder side effects, have been reported.<sup>1</sup> Corneal deposits caused by various drugs have been well documented.<sup>2</sup> We report two cases of corneal deposits associated with flecainide treatment.

### Case reports

#### CASE 1

A 46 year old Danish man started treatment with flecainide 200-300 mg daily in February 1988 for recurrent atrial fibrillation. Six months later he developed photophobia and blurring of and glaring in his vision. Successful concomitant digoxin treatment was started in November 1988 because of relapse of the

atrial fibrillation. In May 1989 his visual acuity with correction by spectacles was 0.8 in the right eye and 0.7 in the left. Biomicroscopy with a slit lamp showed a greyish, superficial configuration of close narrow lines. The centre of the whorl was situated below the centre of the cornea and contained a sharply demarcated rounded area (1 mm<sup>2</sup>) of epithelium with a normal appearance (figure).

Flecainide treatment was discontinued. To relieve symptoms quickly and to establish a diagnosis both eyes were operated on under local anaesthesia. The opacities were easily abraded, and after a few weeks visual acuity was 1.0 in the right eye and 0.9 in the left and the blurring and glare had disappeared. The abraded epithelium was examined by means of high pressure liquid chromatography by Med-Lab AS, Copenhagen, which said that the specimen contained a substance that had the same appearance chromatographically as flecainide and was likely to be flecainide combined, for example, with peptides.

#### CASE 2

A 72 year old Dutch man was treated with flecainide 100-200 mg daily in November 1987 for atrial fibrillation. After four months his visual acuity was 0.5 in the right eye and 0.6 in the left with correction by spectacles. Slit lamp examination gave similar results to those in case 1. Treatment with flecainide was discontinued; after three months vision returned to 1.0 in both eyes.

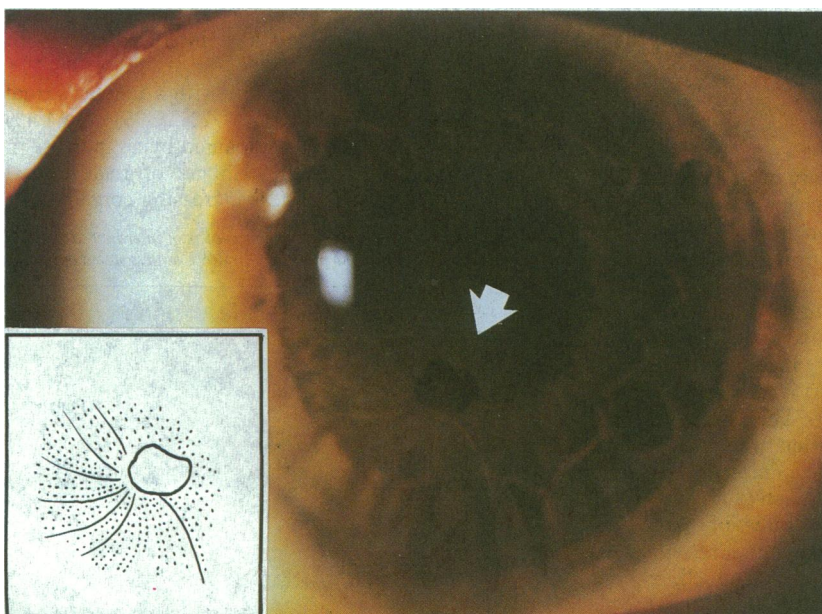
### Comment

Visual disturbance has been described in 28% of patients receiving flecainide.<sup>1</sup> The condition was speculatively thought to be an effect of flecainide on the ciliary muscle, although no slit lamp examinations were carried out.

The chemical structure of flecainide gives it amphipathic cationic properties similar to those of chloroquine and amiodarone, which may permit the formation of drug-lipid complexes that manifest as drug induced lipidosis of the cornea.<sup>3</sup>

The distribution of the corneal pigment is due to epithelial cell slide.<sup>4</sup> The clear area in the figure is atypical of entities with corneal pigmentation and cannot be explained.

That the opacities were situated comparatively superficially is noteworthy. Deposits deeper in the corneal stroma have, however, been found in corneal amiodarone lipidosis,<sup>5</sup> thus implying that prolonged



Slit lamp photograph of corneal deposits of flecainide in case 1. Arrow shows clear zone at centre of whorl. Insert shows that dust like deposits are in verticillate configuration