

BHIVA national clinical audit of HIV diagnosis

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New diagnosis audit preliminary results

Case note review of new diagnoses of HIV:

- ◆ Diagnosed at participating centres Jan-March 2003
- ◆ Or first seen at participating centres Jan-March 2003 having been diagnosed elsewhere less than 2 months before.

Rationale:

- ◆ Follow-up of 2001 audit finding that most patients first started treatment at CD4 <200, but that this was associated with late diagnosis
- ◆ Explore possible reasons for late or missed diagnosis.

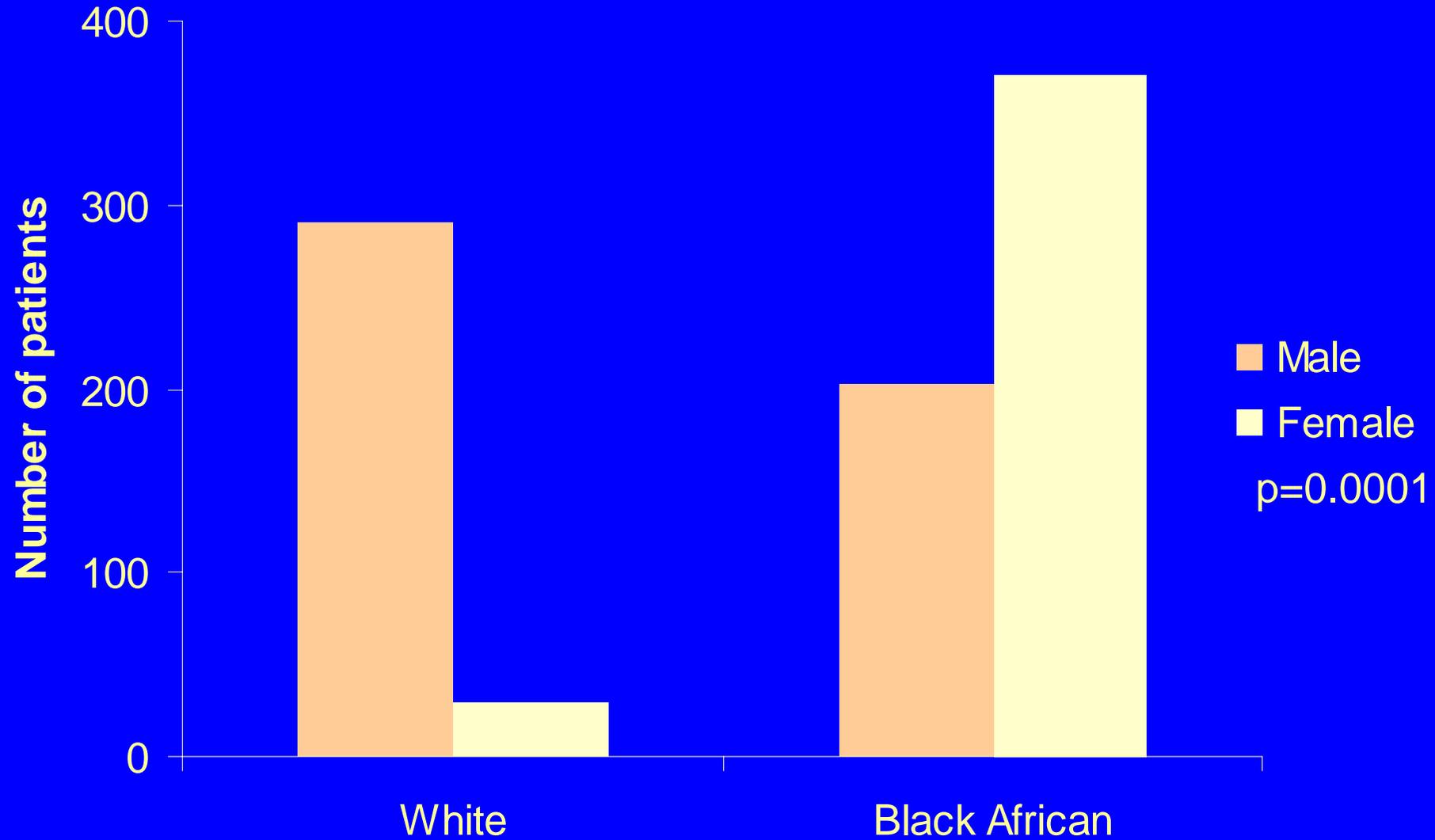
Participation

Data were analysed on 977 newly diagnosed patients submitted by 98 participating centres.

Patients were:

- ◆ 540 (55%) male, 434 (44%) female, 3 not stated
- ◆ 576 (59%) black African, 320 (33%) white, 66 (7%) other, 15 not stated
- ◆ 660 (68%) heterosexually infected, 278 (28%) homo/bisexual, 12 (1%) IDU, 5 other, 22 not stated.
- ◆ 21 (2%) aged 15-19, 312 (32%) aged 20-29, 444 (45%) aged 30-39, 153 (16%) aged 40-49, 32 (3%) aged 50-59, 12 (1%) aged 60+, 3 not stated.

Sex by ethnicity



Other patient characteristics

Of the 977 patients:

- ◆ 89 (9%) were known to be recent arrivals in the UK
- ◆ A further 19 (2%) were returning UK nationals
- ◆ Only 10 (1%) were reported to be short term visitors.

True figures may be higher as information may be incomplete and recent arrival was defined as within two months prior to diagnosis.

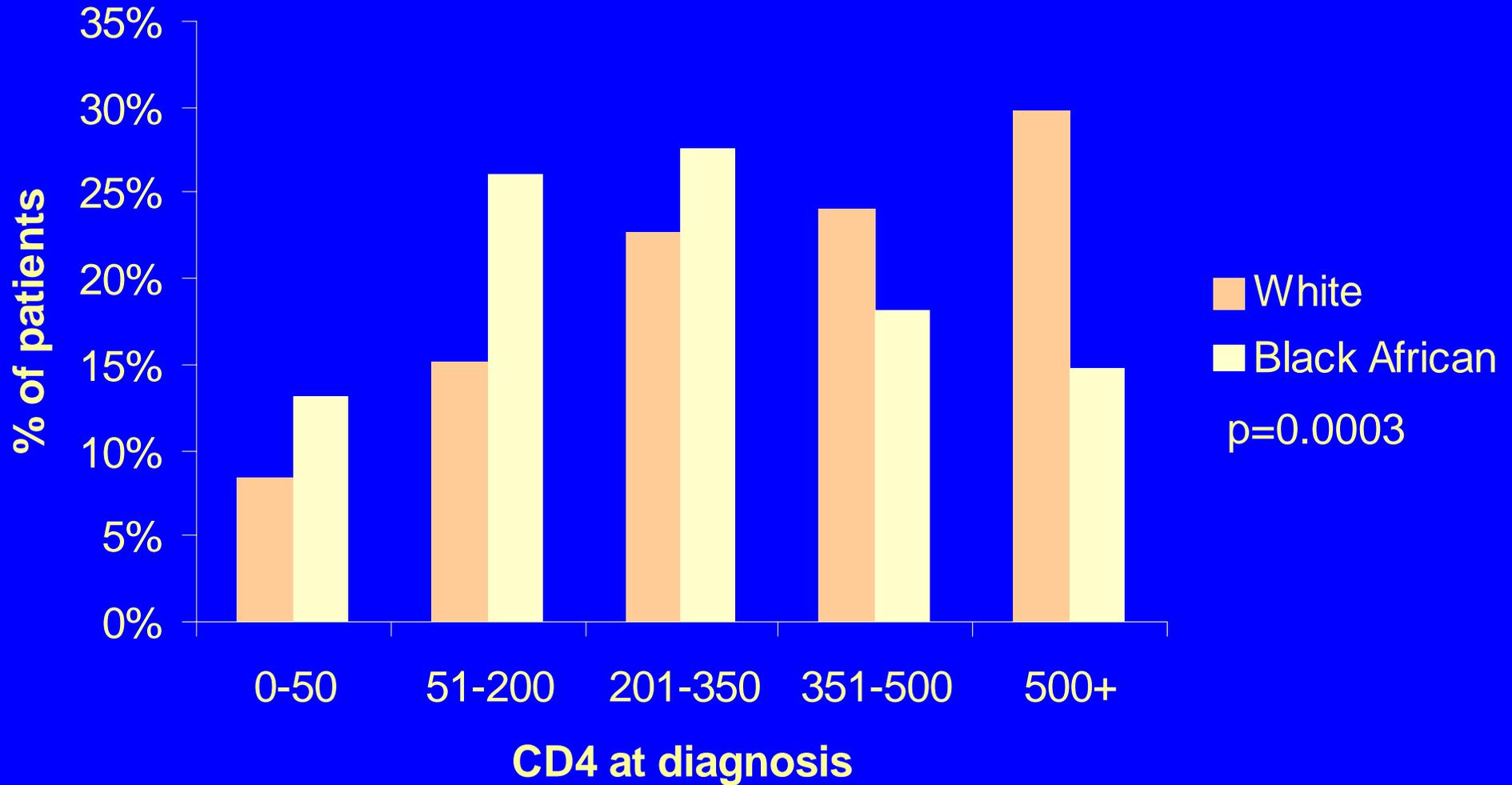
- ◆ 711 (73%) patients were reported to be registered with a GP
- ◆ 162 (17%) were not registered
- ◆ Information was missing for 104.

Disease state at diagnosis:

CD4	Total
0-50	11%
51-200	20%
201-350	24%
351-500	18%
500+	19%
NK/missing	8%
Total	100%

Stage	Total
CDC A	57%
CDC B	25%
CDC C	15%
NK/missing	3%
Total	100%

CD4 at diagnosis by ethnicity



Place of diagnosis

Of the 977 patients:

- ◆ 667 (68%) were diagnosed in GUM/sexual health or HIV centres
- ◆ 107 (11%) as medical in-patients
- ◆ 84 (9%) in antenatal clinics
- ◆ 47 (5%) in general practice
- ◆ 27 (3%) as medical out-patients
- ◆ 38 (4%) in other places, including 8 via NBTS, 4 at insurance medicals, and 2 each in A&E, fertility clinics, private clinics and TOP clinics
- ◆ The place of diagnosis was not stated for 7 (1%).

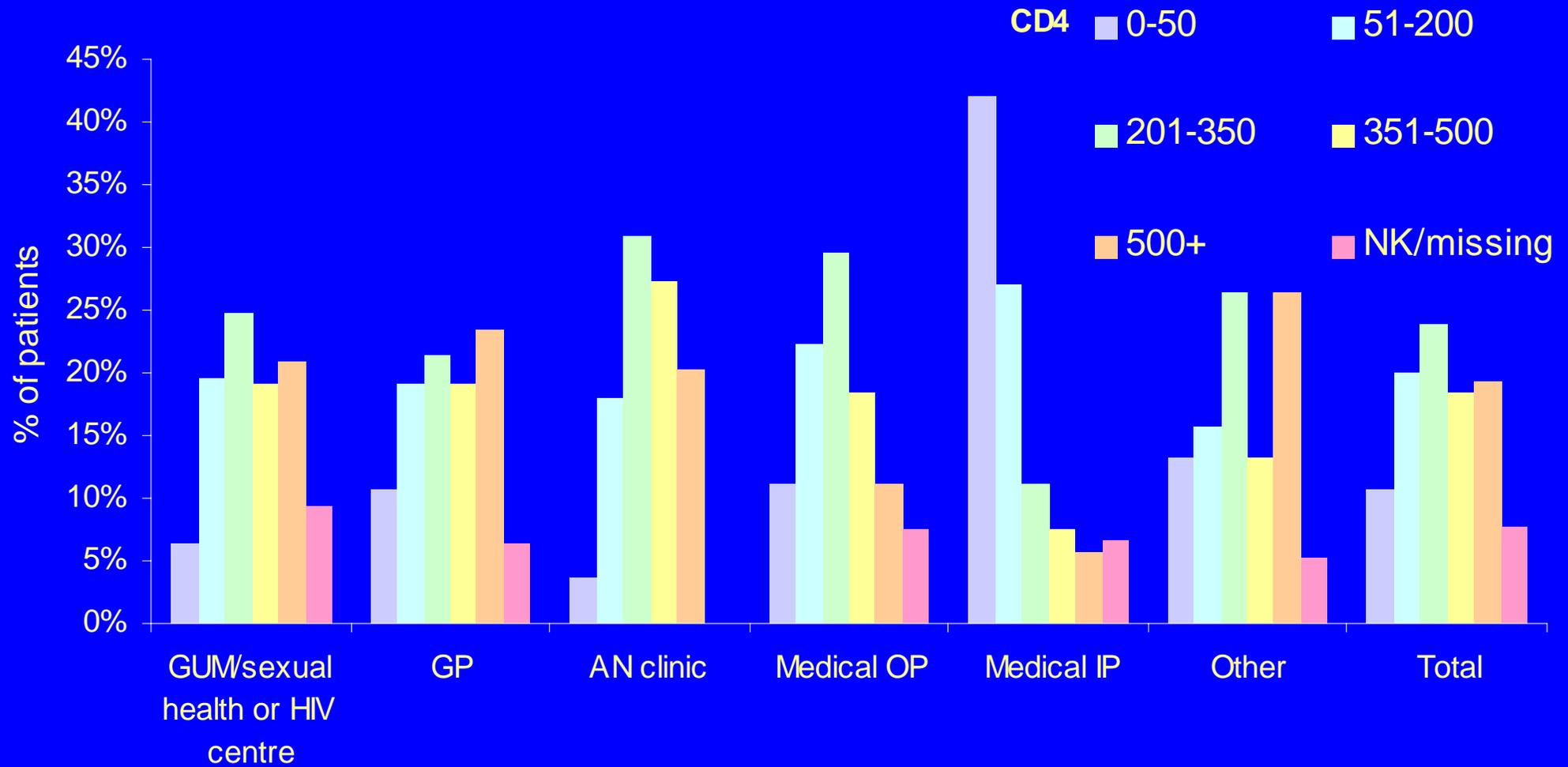
NBTS diagnoses

The eight patients reported as diagnosed via blood transfusion services were all male and included:

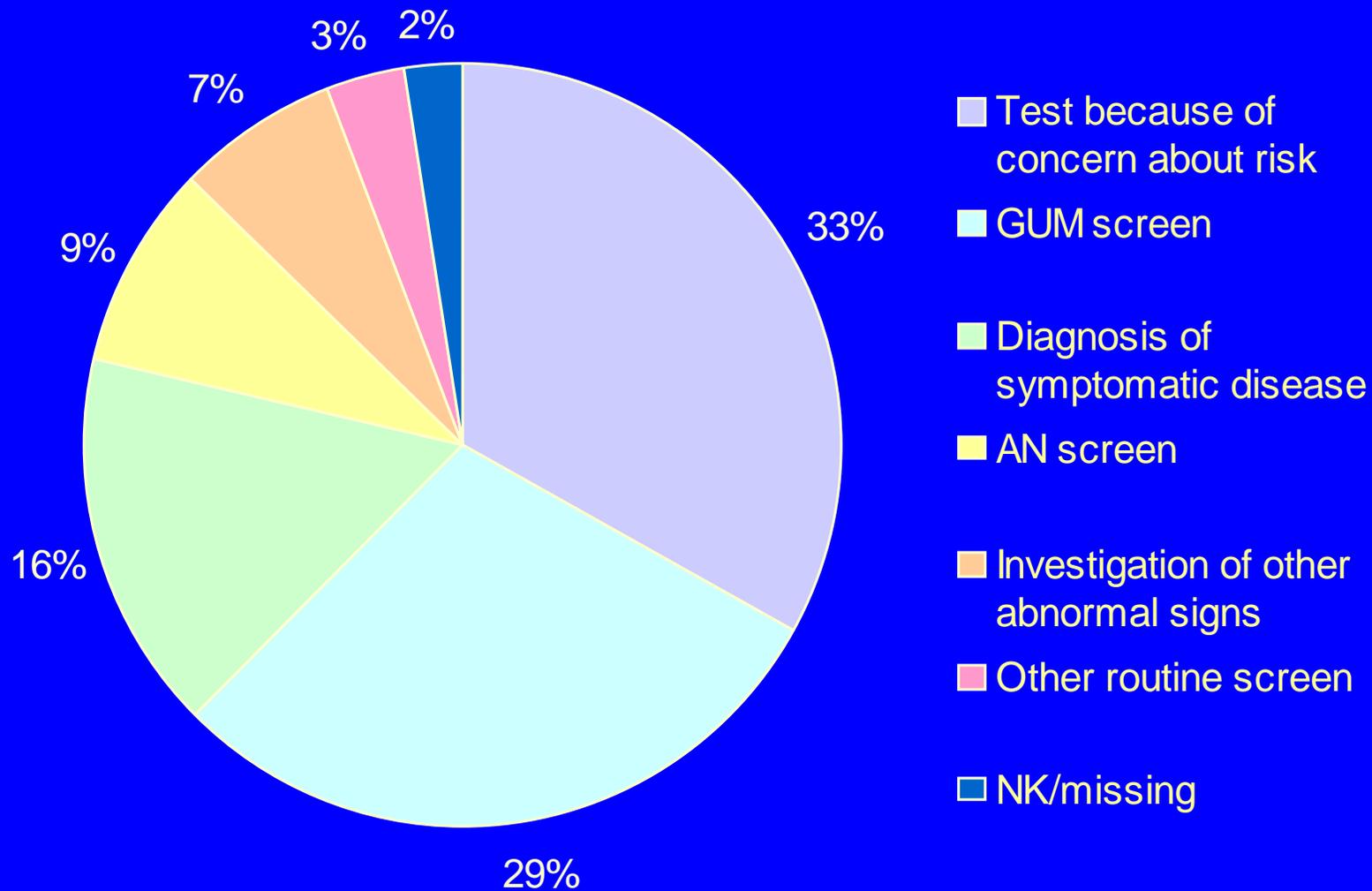
- ◆ 5 Whites, 2 Black Africans, 1 other
- ◆ 5 heterosexuals, 3 homo/bisexuals.

One was a sero-convertor, having given a negative donation five months earlier.

CD4 by where diagnosed



Circumstances of diagnosis



Hospitalisations

A total of 162 (17%) patients were reported to have either been diagnosed as medical in-patients, or to have been admitted to hospital in the year preceding diagnosis:

- ◆ 107 were diagnosed as in-patients, of whom 20 also had an admission in the previous year
- ◆ A further 55 were diagnosed outside hospital after having been admitted in the previous year.

Hospitalisations, continued

Of 75 patients admitted in the year before diagnosis, the reasons for admission were described as:

- ◆ “very likely or definitely” HIV-related for 38 (51%)
- ◆ “possibly” HIV-related for 20 (27%)
- ◆ “not” HIV-related for 12 (16%)
- ◆ Information was missing for 5 (7%).

Reasons for hospitalisation

Reasons for hospitalisation in patients who were either diagnosed as in-patients, or who had been admitted in the year to diagnosis, were classified as follows:

- ◆ 39 patients with opportunistic infections
- ◆ 21 with infections which were not clearly opportunistic
- ◆ 11 with reasons for admission not directly related to HIV
- ◆ 6 each with sero-conversion and with symptomatic HIV disease
- ◆ 3 with genito-urinary conditions
- ◆ 2 each with malignancies and haematological conditions
- ◆ 1 each dermatological and PGL
- ◆ 8 other.

Other HIV-related conditions

170 (17%) patients were reported as having had other possibly HIV-related conditions/symptoms in the year prior to diagnosis.

- ◆ Of these 170 patients, 128 did *not* also have a reported hospital admission prior to or at diagnosis.
- ◆ 17 had an admission prior to diagnosis, 15 were diagnosed as in-patients and 10 fell into both these categories.

Service usage

Of the 170 patients who were reported as having possibly HIV-related non-in-patient symptoms/conditions in the year before diagnosis, 129 were known to have sought care from at least one service:

- ◆ 71 had attended general practice
- ◆ 37 had attended hospital out-patients
- ◆ 20 had attended a GUM/sexual health clinic
- ◆ 16 had attended other services
- ◆ 22 were reported as “self-care only – did not seek medical attention”.

Reported symptoms/conditions

Non-in-patient symptoms reported in the year to diagnosis were classified as follows:

- ◆ 48 GU conditions (32 classed as “primary” condition, 9 attended GP, 15 attended GUM)
- ◆ 43 opportunistic infections (42 primary, 18 attended GP)
- ◆ 33 symptomatic HIV disease (21 primary, 15 attended GP)
- ◆ 23 seroconversion (18 primary, 11 attended GP)
- ◆ 22 infections (17 primary, 13 attended GP)
- ◆ 17 dermatological conditions (11 primary, 10 attended GP)

Reported symptoms/conditions

Continued:

- ◆ 14 haematological conditions (8 primary, 3 attended GP)
- ◆ 11 PGL (7 primary, 4 attended GP)
- ◆ 4 not directly HIV-related (1 primary, 0 attended GP)
- ◆ 2 malignancies (2 primary, 0 attended GP)
- ◆ 1 hepatitis C (primary, did not attend GP)
- ◆ 8 other (6 primary, 4 attended GP)

Missed diagnoses?

The circumstances of diagnosis for the 75 patients admitted to hospital in the year previous to diagnosis were as follows:

- ◆ 18 routine screening (14 GUM, 1 AN, 3 other), including 4 whose admission was “very likely or definitely” HIV-related and 7 “possibly” HIV-related.
- ◆ 17 concern about risk
- ◆ 22 diagnosis of symptomatic disease
- ◆ 18 investigation of other abnormal signs.

This suggests that in at least some cases the diagnosis was not made as part of the follow-up of the admission.

Missed diagnoses? - continued

Similarly, of the 143 patients who had symptoms but not a hospital admission in the year to diagnosis, circumstances of diagnosis were as follows:

- ◆ 42 routine screen (31 GUM, 8 AN, 3 other)
- ◆ 41 concern about risk
- ◆ 40 diagnosis of symptomatic disease
- ◆ 17 investigation of other abnormal signs.

Other reported findings

9 patients were reported as lost to follow-up after diagnosis but not known to have left the UK.

5 patients were reported to have died. All were Black African. One had PCP, one had KS, one had group A strep septicaemia & pericardial sepsis, and one had cerebral toxoplasmosis (data uncertain, but probably developed after diagnosis of HIV).

Conclusions

This audit shows continuing evidence of late diagnosis of HIV infection, and potentially avoidable disease.

As expected, black African patients were diagnosed later than whites.

Routine screening accounted for less than half of diagnoses – further steps may be needed to increase screening uptake.

Although the course of events was unclear in many cases, there is also some evidence of delayed diagnosis after patients have presented with symptomatic disease.