

and one every three months. Neither awareness of the inquiry nor whether a coordinator was responsible for screening had an effect on the updating of policies. In 108 units (90%) policies were said to be agreed by everyone implementing them. One unit reported that community midwives were excluded from agreement of policy, another that medical staff constructed policies without consulting midwives. Written policies were received from 65 midwifery units; the adherence of these policies to the royal college guidelines is shown in the table.

A key person responsible for coordinating screening was reported in 106 units (68%). This correlated with the existence of a local policy for Down's syndrome ($P = 0.045$) but not for neural tube defect or haemoglobinopathy. Of these people 42 were midwifery managers, 23 specialist coordinators (including one genetic counsellor), and 18 consultants.

Where written policies existed they varied widely in adherence to the guidelines, and only one covered all five points. There was no evidence that obstetricians' and midwives' awareness of the inquiry (the evidence base for many policies) was consistent within units. Community midwives were sometimes excluded from policymaking, even though they were relied on for identification and initial counselling of women. One policy "agreed by all" had criteria for screening and referral that differed for each named consultant.

Comment

We found that antenatal units were generally unaware of the royal college's recommendations on screening. National guidelines and local written policies should be adopted to promote informed choice and equity of service.¹ Coordinated antenatal genetic screening will be even more important with the mapping of the human genome. Units without an identified person responsible for antenatal screening face the risk of being overwhelmed by advances in the field, and national audits will be compromised if no single person can be approached for reliable information.

Competing interests: None declared.

Funding: Department of Health's confidential inquiry into genetic counselling by non-geneticists.

Contributors: BL conceived the study and distributed questionnaires. BL and KC collated and analysed data. HJH contributed to interpretation and analysis of data. The paper was written jointly by all authors. RH is the guarantor for the study.

- 1 Harris R, Lane B, Harris H, Williamson P, Dodge J, Modell B, et al. National confidential enquiry into counselling for genetic disorders by non-geneticists: general recommendations and specific standards for improving care. *Br J Obstet Gynaecol* 1999;106:658-63.
- 2 Confidential Enquiry into Genetic Counselling by Non-Geneticists. www.medicine.man.ac.uk/geneticenquiry/counsell.htm (accessed 9 Oct 2000).
- 3 Royal College of Obstetricians and Gynaecologists Clinical Audit Unit. *Effective procedures in maternity care suitable for audit*. London: RCOG, 1997.

(Accepted 1 August 2000)

Drug points

Tachycardia associated with moxifloxacin

Martin Siepmann, Wilhelm Kirch, Institute of Clinical Pharmacology, Medical Faculty, Technical University, 01307 Dresden, Germany

The fluoroquinolone grepafloxacin has been associated with tachycardia in animals and humans.^{1,2} It was eventually withdrawn from use owing to prolongation of the QT interval. Another fluoroquinolone, moxifloxacin (Avalox, Bayer Vital), was introduced in Germany in September 1999 and two months later in the United States. The chemical structure of moxifloxacin is similar to that of grepafloxacin, and both drugs have a broad spectrum of activity against bacteria, including Gram positive bacteria. Up to March 2000 about one million patients have been treated with moxifloxacin, and half of them have been evaluated for adverse events (Bayer Vital, personal communication). We describe the first case of tachycardia associated with moxifloxacin.

A 49 year old non-febrile man was prescribed moxifloxacin for sinusitis and bronchitis. About 45 minutes after taking the daily dose of 400 mg moxifloxacin he developed tachycardia (120 beats per minute). About 60 minutes before taking the moxifloxacin he had taken 500 mg aspirin for a headache. He described the tachycardia as "thumping" palpitations, which he had never before experienced. The symptoms lasted for 45 minutes. Tachycardia did not recur when moxifloxacin was restarted. The patient has no history of cardiovascular disease and regularly exercised on cycle and rowing machines. The day before the tachycardia an electrocardiogram was recorded that gave normal results (sinus rhythm 75, no abnormal changes).

We informed the German Federal Institute for Drugs and Medical Devices and the Drug Commission of the

German Medical Profession. They cited 19 other reported cases of tachycardia in association with moxifloxacin.

The underlying mechanism may be vasodilatation either directly or indirectly owing to release of histamine with reflex tachycardia. These effects have been described for fluoroquinolones such as flosequin.^{3,4} Tachycardia could also be due to prolongation of the QT interval. Prolongation (QT interval >450 milliseconds) has been documented in 38 patients treated with 400 mg moxifloxacin daily.⁵

Competing interests: None declared.

- 1 Stahlmann R, Schwabe R. Safety profile of grepafloxacin compared with other fluoroquinolones. *J Antimicrob Chemother* 1997;40(suppl A):83-92.
- 2 Lode H, Vogel F, Elies W. Grepafloxacin: a review of its safety profile based on clinical trials and post marketing surveillance. *Clin Ther* 1999;21:61-74.
- 3 Takayama S, Hirohashi M, Kato M, Shimada H. Toxicity of quinolone antimicrobial agents. *J Toxicol Environ Health* 1995;45:1-45.
- 4 Janssen MC, Smits P, Reyenga J, Thien T. Acute effects of flosequin (BTS 49465) in untreated moderate to severe hypertension. *J Hum Hypertens* 1995;9:363-8.
- 5 Balfour JA, Lamb HM. Moxifloxacin. A review of its clinical potential in the management of community-acquired respiratory tract infections. *Drugs* 2000;59:115-39.

Endpiece For a sundial

Loss and Possession, death and life are one,
There falls no shadow where there shines no sun.

Hilaire Belloc (1870-1953), *For a sundial*

Submitted by Fred Charatan,
retired geriatric physician, Florida