

anticholinergic or vasoactive drugs;  $\beta$  adrenergic antagonists have been favoured in an attempt to modify the ventricular baroreceptor response. One formal trial of medical treatment has shown no significant improvement mainly because the rate of recurrence was so low.<sup>12</sup> Treatment of not so simple faints is unsatisfactory.

The precise diagnosis of a faint also has important social consequences. People who are prone to simple predictable faints are allowed to drive, whereas people liable to sudden loss of consciousness are not. Doctors must decide, appreciating that no incontrovertible test exists to help them. An accurate history tells all.

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## Treating dizziness with vestibular rehabilitation

### *Exercises provide physical and psychological benefits*

Each year five people out of every 1000 consult their general practitioner because of symptoms that are classified as vertigo; a further 10 in 1000 are seen for dizziness or giddiness.<sup>1</sup> As many as one in four people aged 50 to 65 suffer from dizziness, which is even more common in elderly people.<sup>2</sup> Despite the prevalence of and morbidity associated with balance disorders the value of vestibular rehabilitation is not widely recognised, and the availability of trained personnel and appropriate facilities is very limited both within and outside the health service.

Once the obvious and sinister causes for the symptom have been excluded patients are commonly reassured and advised to "learn to live with it." Yet more serious investigation and active management is indicated as persistent dizziness or vertigo can result in chronic invalidism, with a severely circumscribed lifestyle, occupational disability, and a degradation in fitness, mobility, and balance that can have damaging repercussions in later life.<sup>3</sup> Moreover, the drugs that are often prescribed for symptomatic relief, such as vestibular sedatives and tranquillisers, may retard recovery.<sup>4</sup>

In a substantial proportion of cases of dizziness a specific cause cannot be identified with certainty, even though evidence of vestibular dysfunction may exist. Diagnosis is further complicated by the close and complex relation between dizziness and anxiety. Dizziness is one of the key symptoms of panic, and more than four out of five people with panic disorder report it.<sup>5</sup>

On the other hand, recent research indicates that panic and agoraphobia may often be triggered by an underlying dysfunction of balance.<sup>6</sup> After specific general medical or otological conditions have been excluded there therefore exists a group of patients who pose a particularly intractable problem of differential diagnosis—is panic or balance disorder the primary cause of their dizziness? Fortunately, provided that investigation has excluded treatable disease, both the physical and the psychological causes and consequences of dizziness can be simultaneously addressed by a form of treatment known as "vestibular rehabilitation" or "balance retraining."<sup>8,9</sup>

First used to speed habituation after surgically induced unilateral vestibular dysfunction,<sup>10</sup> vestibular rehabilitation is now applied to a wide range of balance disorders. Patients perform slow then more rapid head movements to stimulate

the vestibular system and enhance the central compensation for the asymmetry in the peripheral vestibular input. At the same time exercises entailing eye movement and changes in posture are instituted to promote the recovery of normal vestibulo-ocular and vestibulospinal reflexes. At first the exercises induce symptoms of dysequilibrium, but with continued practice patients habituate to the positions and movements that originally provoked dizziness.

In addition to the improvement in symptoms achieved by means of habituation, vestibular rehabilitation offers psychological benefits—by supplying patients with an understanding of their dizziness and by encouraging them to cope actively with their problem. Basic education about the functioning of the balance system allows the patient to distinguish the symptoms induced by movement or disorienting environments from the onset of an acute spontaneous attack, thus rendering the dizziness more understandable and predictable. A rational physical explanation for their symptoms relieves patients of anxieties relating to underlying disease (most commonly, fear of an undiscovered brain tumour) and allays concern that their complaints may be interpreted as a sign of emotional weakness. The diagnosis also ends the potentially damaging introspective search for defects of personality or lifestyle to account for their otherwise inexplicable symptoms. But whereas physical explanations for ambiguous symptoms can sometimes foster inappropriate illness behaviour, the rationale for vestibular rehabilitation encourages the gradual resumption of normal activity and emphasises that control over recovery resides with the patient.

The performance of graded exercises that provoke dizziness in a controlled manner and safe environment helps patients to discover that their symptoms are less terrifying than they previously believed and shows them that they are able to tolerate and cope with disorientation. In cases where the dizziness seems to be related to increased psychological arousal and hyperventilation, the vestibular exercises can be supplemented by training in relaxation and respiratory control.<sup>11</sup> If the dizziness is associated with excessive anxiety and avoidance of particular activities and environments then cognitive and behavioural techniques used in the treatment of panic and agoraphobia may be useful.<sup>12</sup>

Clinical trials of the efficacy of exercise programmes

typically report improvement in symptoms in over 80% of those participating but with complete elimination of vertigo and dizziness in less than a third.<sup>3 9 13</sup> Balance retraining is a rehabilitative rather than a curative technique and cannot therefore be expected to prevent the recurrence of active disease or to relieve symptoms without a vestibular origin or that are unaffected by position or movement. Nevertheless, the acceleration of habituation by means of exercises results in much less dizziness in most patients; its far reaching psychological benefits may be helpful even to those with recurrent vertigo or whose dizziness seems related to anxiety.

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## Antenatal screening for syphilis

*Should continue—at least until the results of new surveillance studies are known*

Congenital syphilis in children is rare in Britain, and most doctors will never have seen a case. The only routine data currently available are reports from genitourinary medicine clinics, the KC60 returns. In the last two years for which data are available (1991 and 1992) clinics in England reported 220 new diagnoses of infectious syphilis in women (pregnant or otherwise) and five of congenital syphilis in children under 2.<sup>1 2</sup> Women identified through antenatal screening, however, may not be treated in genitourinary medicine clinics, and some infected children may be seen only by paediatricians—so that the true incidence of both conditions is unknown.

What can be done to prevent congenital syphilis? Transmission from mother to child usually takes place after four months' gestation, so early antenatal serological screening and treatment prevent most cases. Detection later in pregnancy is less effective, but even postnatal treatment of an infected child prevents many sequelae. Tests occasionally miss maternal infection, especially if only reagin agglutination tests (rapid plasma reagin or Venereal Disease Reference Laboratory test) are used,<sup>3</sup> and though new maternal infections may occur in late pregnancy, this will happen rarely in a country where the incidence of the disease is low. If there is any reasonable possibility of active syphilis in pregnancy it is best to treat it with injectable penicillin.<sup>4</sup> Apart from causing very rare Jarisch-Herxheimer reactions, this treatment is safe and highly effective. Unfortunately, maternal treatment with erythromycin in cases of penicillin allergy does not reliably treat fetal infection.<sup>4</sup> A child born to a mother who may have been infected requires careful examination and follow up with serological monitoring. Again, treatment should be given if there is a suspicion of active infection or if maternal treatment has been suboptimal.<sup>4</sup>

General practitioners, paediatricians, and obstetricians need to be aware that congenital syphilis still occurs.<sup>5</sup> It should be suspected after stillbirth and in infants with persistent jaundice, non-specific fever, anaemia, or failure to thrive (classic features such as "snuffles" or a desquamating rash are rare).<sup>6</sup> Once the diagnosis is suspected specialist advice should be taken. Specialists in genitourinary medicine are best able to diagnose the disease in mothers (who will be at risk of other sexually transmitted diseases) and they will notify partners. Interpreting the result of tests for syphilis, in

adults and children, may not be easy without advice from specialists, particularly if there is concurrent HIV infection.<sup>7</sup> In England and Wales the network of public health laboratory service reference laboratories is available to help in the selection of tests and interpretation of their results.

Some authorities now question the need to continue screening pregnant women given the apparent low level of infection.<sup>8</sup> Although in Britain the incidence of infectious syphilis in women may be low, it may not remain so indefinitely. Indigenous cases of syphilis have increased recently in the United States, where failure to deliver universal early antenatal care (including screening) has permitted an epidemic of acquired syphilis in adults to be translated into an epidemic of congenital syphilis<sup>9</sup> with rates among infants increasing from 4·3/100 000 live births in 1982 to 94·7/100 000 in 1992.<sup>10</sup> Factors driving the American increase—poverty and use of drugs<sup>6 9</sup>—are prevalent in Britain. A more important reason for new acquired and congenital infection in Britain may be international spread. All sexually transmitted diseases, including syphilis, are commoner in developing countries<sup>11</sup> and are often spread through travel and migration.<sup>12</sup> Between 1989 and 1991 two thirds of the cases of early infectious syphilis seen in a south London genitourinary medicine clinic were imported.<sup>13</sup>

Several new surveillance initiatives will enhance our knowledge of the incidence of syphilis in Britain. Last year, the Public Health Laboratory Service and St Mary's Hospital, London, began a survey of congenital syphilis through the British Paediatric Surveillance Unit. Complementing this will be a survey of syphilis in pregnancy and congenital syphilis conducted by the British Cooperative Clinical Group of consultants in genitourinary medicine. In both these surveys doctors are asked to report the number of new cases that they have seen over a period even if the total is zero.

A preventive strategy for congenital syphilis will include general measures to prevent sexually transmitted diseases. But if congenital syphilis is to remain rare not only clinicians but also managers of provider units, purchasers, and public health physicians must be aware that it still occurs. Should antenatal screening remain integral to the preventive strategy? Past assessments have concluded that considerable benefit resulted from screening pregnant women in Britain,<sup>14 15</sup>