

towards simpler tests, such as the agglutination inhibition techniques reported,<sup>10 11</sup> particularly if they can be made sensitive enough to be used on a morning urine specimen. Possibly a "dip" test may become practicable, which could be carried out at each antenatal visit or even daily.

Our present policy rightly emphasises improvement in the quality of life, so that mere reduction in perinatal mortality is seen as inadequate. Possibly for every perinatal death two or three children survive severely damaged.<sup>2 12</sup> The causes of handicap and its severity vary in different communities at different times. Recently more children with spina bifida and Down's syndrome have survived longer, whereas kernicterus and phenylketonuria are now less frequent causes of long-term handicap. No strict assessment has yet been reported, but there seems no evidence that selective premature delivery of fetuses who have been judged by placental function tests to be seriously at risk has resulted in more long-term morbidity.<sup>13 14</sup> Even so, clearly further careful trials of known tests for predicting fetal death are needed, especially those which also study the long-term effects of intervention on the child.

Today's harsh economic climate means that every procedure used in medical practice should be analysed for its cost-effectiveness. Such a requirement is probably a blessing in disguise, for sound economic practice is usually good clinical practice. An outstanding example of this approach to obstetric and perinatal care is the French *Rationalisation des Choix Budgétaires*—explained for the English reader in a concise and lucid publication, *Prevention of Handicap of Perinatal Origin*.<sup>12</sup> The cost of reproductive casualties in France was reckoned at £2000 million per annum at 1976 prices and it was estimated that possibly 30% cases were preventable by systematic application of present techniques. The report recommended that 58% of additional resources should be allocated to improving antenatal care, particularly in increasing the tests done rather than the number of antenatal visits, and in providing referral centres for women at risk. As a comparison<sup>15</sup> of the French approach with British practice put it, "The French Government believe that the major preventive measure is improving the general standard of antenatal and paediatric care. How cost-effective will the British programme be if aid to preventive schemes is paid for by an increase in handicap due to deteriorating standards of prenatal and intrapartum care?"

Tests to discover how the hidden patient is faring are complex, as is organising them and deciding if, when, and how premature delivery should be performed. As Dr Rosalinde Hurley says in her preface,<sup>1</sup> "Many of the procedures . . . are only possible if delivery is effected in hospital and it is disheartening to reflect that the pace of advance in obstetric care could decelerate if maternity beds were closed."

<sup>1</sup> Royal College of Pathologists, *Journal of Clinical Pathology*, 1976, **29**, suppl 10.

<sup>2</sup> Chard, T, *Journal of Clinical Pathology*, 1976, **29**, suppl 10, 18.

<sup>3</sup> Ursell, W, Brudenell, M, and Chard, T, *British Medical Journal*, 1973, **2**, 80.

<sup>4</sup> Greene, J W, and Touchstone, J C, *American Journal of Obstetrics and Gynecology*, 1963, **85**, 1.

<sup>5</sup> Spellacy, W N, Buih, W C, and Birk, S A, *American Journal of Obstetrics and Gynecology*, 1975, **121**, 835.

<sup>6</sup> Beischer, N A, et al, *Journal of Obstetrics and Gynaecology of the British Commonwealth*, 1968, **75**, 1024.

<sup>7</sup> Dickey, R P, Grannis, G F, and Hanson, F W, *American Journal of Obstetrics and Gynecology*, 1972, **113**, 880.

<sup>8</sup> Cummings, R V, Rourke, J E, and Shelley, T F, *American Journal of Obstetrics and Gynecology*, 1969, **104**, 1047.

<sup>9</sup> Tulchinsky, D, in *Plasma Hormone Assays in Evaluation of Fetal Well-being*, ed A Kloppner, p 72. Edinburgh, Churchill Livingstone, 1976.

<sup>10</sup> Yanaihara, T, et al, *American Journal of Obstetrics and Gynecology*, 1975, **123**, 700.

<sup>11</sup> Theppisai, H, Mishell, D R, and Nakamura, R M, *Journal of Clinical Endocrinology and Metabolism*, 1971, **32**, 382.

<sup>12</sup> Wynn, M, and Wynn, A, *Prevention of Handicap of Perinatal Origin*. London, Foundation for Education and Research in Child-bearing, 1976.

<sup>13</sup> Greene, J W, et al, *American Journal of Obstetrics and Gynaecology*, 1969, **105**, 730.

<sup>14</sup> Yogman, M W, et al, *American Journal of Obstetrics and Gynecology*, 1972, **114**, 1069.

<sup>15</sup> *Lancet*, 1976, **2**, 941.

## Surgery for Menière's disease

The indications for surgical intervention for treating any disease should be clear. When they are not, this usually shows that there is disagreement about the efficacy and merits of the various methods used. At the one extreme, surgical removal of a part may be needed to preserve life when there is little room for difference of opinion. At the other extreme, however, operation may be offered for the relief of symptoms of a disease that does not endanger life in any way. In those circumstances the measures proposed, which may be effective in varying degrees, demand close scrutiny. The quality of life offered and the risks of the procedure must be carefully balanced.

Menière's disease falls into this category. In general, otologists accept that in most patients symptoms can be controlled satisfactorily by conservative treatment. Many would agree that no more than 5% of the cases seen require any form of surgical intervention. To these 5% with disabling but not fatal vertigo, surgery offers a bewildering bouquet of procedures. Furthermore, the patient suffers from vertigo, tinnitus, and deafness: the treatments proposed offer the possible relief of the first and may on occasion affect the second and third.

The procedures vary from the ultra-conservative myringotomy and insertion of a grommet drain to the more radical destruction of the labyrinth. Both may bring speedy relief with comparative safety. No one can say with certainty why the grommet drain works, but undoubtedly many patients find it very effective.

More elaborate procedures may be divided into two categories. Ultrasound and division of the vestibular nerve interrupt the neural pathways carrying misleading labyrinthine information to the brain. Saccus decompression and the subarachnoid shunt procedure seek to relieve the increased fluid tension in the endolymphatic system.

Ultrasonic destruction of the vestibular labyrinth was first introduced by Arslan of Padua.<sup>1</sup> Arslan's technique was refined and brought to scientific precision by Angell James<sup>2</sup> in Britain. Nevertheless, while the vertigo was improved in most patients, the relief was not always permanent: hearing was not always preserved; and in the end many patients had to undergo a formal labyrinthectomy.

Decompression of the saccus endolymphaticus is the procedure recommended by Shambaugh.<sup>3</sup> In essence the procedure consists of the microdissection of the saccus exposing its lateral surface in the bony recess in which it lies. This allows the distended saccus to expand into the cortical mastoid cavity created by the operation of access. Few complications follow this procedure, though total death of the labyrinth may occur on the operated side. This operation, too, is not always successful in relieving the vertigo.

In 1962 House<sup>4</sup> introduced a microshunt into the saccus endolymphaticus, draining it into the subarachnoid space via

the posterior cranial fossa. This was certainly more effective, but there was an increased incidence of serious complications including meningitis and death.

More recently surgeons have become enthusiastic about the results of dividing the vestibular nerve. The operation was first described by Parry as long ago as 1904, but has come to the fore again only in the last ten years. It may be carried out either by the translabyrinthine route, in which case the labyrinth is destroyed too, or through the middle cranial fossa. The vestibular nerves and Scarpa's ganglion are divided in the internal auditory meatus. House<sup>5</sup> preferred the middle fossa approach in the hope that the hearing might be preserved or even improved. The approach is difficult technically, and once again the procedure is not free from risk. In one recent series<sup>6</sup> of 18 cases 17 lost their vertigo for between six months and three years. Two patients found an improvement in their hearing. Nevertheless, eight out of the 18 developed delayed facial weakness. An additional case, not included in the series because of the shortness of the follow-up, suffered sensory deafness. This is not altogether surprising because of the variable pattern of the blood vessels within the internal auditory meatus.

Remissions in Menière's disease are common, and even severe cases have been known to enjoy periods of complete freedom from symptoms. Hence the indications for section of the vestibular nerves through a middle fossa craniotomy with its attendant risks must be restricted indeed.

<sup>1</sup> Arslan, M, *Minerva Otorinolaringologica*, 1953, **3**, 141.

<sup>2</sup> Angell, J J, *Annals of the Royal College of Surgeons of England*, 1963, **33**, 226.

<sup>3</sup> Shambaugh, G E, *Archives of Otolaryngology*, 1966, **83**, 305.

<sup>4</sup> House, W F, *Laryngoscope*, 1962, **72**, 713.

<sup>5</sup> House, W F, *Laryngoscope*, 1961, **71**, 1363.

<sup>6</sup> Smythe, G D L, Kerr, A G, and Gordon, D S, *Journal of Laryngology and Otology*, 1976, **90**, 823.

## Hospital and community paediatrics

Those who spent the Christmas holiday reading the report of the Child Health Services Committee<sup>1</sup> will have met the New Year with mixed feelings. To a paediatrician something weighing 1 kg after three years' gestation might be considered light-for-dates; but the Court report is not lightweight, nor are its proposals, most of which are supported by massive evidence and well-reasoned argument.

Publicity has been given in the national and medical press<sup>2</sup> to the Committee's determination to improve the standard of primary care for children by the urgent creation of specially trained general practitioner paediatricians (GPPs) and children's health visitors (CHVs). The proposals for other parts of children's health services seem less dramatic by comparison but will require considerable change nevertheless.

The role of the hospital consultant paediatrician is little changed. He retains the present responsibility for clinical care, organisation, and advice. Paediatricians will welcome the demand for more staff who have received specific children's training, and they will agree with the frightening warning that the level of nursing has fallen to a dangerous level (in many districts there is little chance of a seriously ill baby in hospital being cared for at night by a nurse with either training or experience of children).

The trend towards specialisation within paediatrics is

acknowledged. This has happened already: many regional centres have paediatricians who spend all or most of their time in a particular area of children's medicine such as nephrology or neurology. They need legitimising, more are needed, and their training should be co-ordinated. Paediatricians themselves have been ambivalent about the creation of whole-time neonatal specialists. Care of the newborn is a big part of the work of most paediatricians, and some have felt the super-specialist to be an unnecessary threat to their own work. The Court report outlines the tremendous needs and opportunities in the care of the newborn, and is adamant that some fully committed neonatologists are needed. Each region should have at least one such specialist, who would be responsible for a central neonatal intensive care unit, adequately staffed and equipped, which would be a centre of excellence for training medical and nursing staff in the special and intensive care of babies and a referral centre for other areas. It will be necessary for the regions to consider how they help the districts concerned to finance these services that have a regional responsibility.

The emphasis throughout the report on the use of special staff for children—*school nurses, children's health visitors, children's nurses, general practitioner paediatricians*—has huge training implications. The hospital paediatrician, and particularly the one in a university, is already overwhelmed with teaching commitments for undergraduate and graduate medical staff, nurses, therapists, and social service and educational staff. They cannot take on more. This is an important additional reason for the sort of staff expansion proposed in the report: the number of senior registrars doubling, and that of registrars and senior house officers increasing by 50%. Imagination, skill, and diplomacy will be needed in the deployment of the new jobs. One large problem is the training of doctors in community and primary care work. The traditional house officer, registrar, consultant chain does not exist outside hospitals: and all too often people are thrust into a school and told to get on with "the clinic." A structure must be created in which expertise can be developed and handed on in this community paediatric work. There should be opportunity for supervised work before full responsibility is assumed.

More than half of the proposed new consultant paediatric posts are for the new post of consultant community paediatrician—discussed at length in recent years. He is to be a consultant with special skills in the care of the handicapped and in educational and social paediatrics. Much time will be spent with the district handicap team; he will be the consultant paediatrician for the schools and available to the GPPs doing school work, and he himself will be doctor to the special schools. He will co-operate with the local authority social services on such subjects as children in care and adoption. In addition, and according to his particular interest, he will retain a role in the district hospital. More than anyone else he will be the liaison figure between hospital (supportive care) and community (primary care). He will be in the best position to influence the standard of primary care in the district in all matters ranging from infant feeding practices, immunisation, and developmental surveillance to the treatment of otitis media and epilepsy. The report envisages that a 240 000 population district (with 60 000 children) would require at least one designated consultant community paediatrician and that some of the present senior medical officers will be suitable. It will be a difficult interim period, for it would be disastrous to fill the posts with inadequately trained staff, and it will take time to achieve satisfactory training programmes for the new job.

The report runs into a familiar difficulty of Government