BRITISH MEDICAL JOURNAL

SATURDAY 25 DECEMBER 1976

LEADING ARTICLES

PAPERS AND ORIGINALS

MEDICAL PRACTICE

NO 6051 BRITISH MEDICAL JOURNAL 1976 VOLUME 2 1521-1570
BRITISH MEDICAL ASSOCIATION TAVISTOCK SQUARE LONDON WC1H 9JR.

ASTM CODEN: BMJOAE 2 (6051) 1521-1570 (1976)
WEEKLY. SECOND CLASS POSTAGE PAID AT NEW YORK NY

CORRESPONDENCE

Correspondents are urged to write briefly so that readers may be offered as wide a selection of letters as possible. So many are being received that the omission of some is inevitable. Letters should be signed personally by all their authors.

Neonatal respiratory intensive care at local level

SIR,—Following on the 1974 Oppé report[1] and apparently supported by opinion originally stemming from North American medical schools[2] the Department of Health and Social Security is currently recommending the centralisation of neonatal respiratory intensive care at a mainly Regional level,[3] though "regional" and "Regional" have different meanings and implications on the two sides of the Atlantic, where population density and ease of communications vary considerably.

We have completed a 12-month trial of Searle arterial oxygen probes in a 25-cot peripheral neonatal unit 75 miles (120 km) from the nearest teaching centres but serving a compact industrial and maritime population of 170 000 plus a further 100 000 in a scattered rural area stretching 30 miles (48 km) away. Twenty-eight infants born in four hospitals in this locality were monitored successfully in this unit for a total of 1970 hours (21% of 12 months). Probe insertion failed in a further four infants and three more infants had non-functioning probes. A second monitor (which we now have) would have allowed several other infants to be monitored beneficially during this time and a chart recorder greatly enhanced the value of the technique. No complications or persisting side effects were found, but the management of sick infants was greatly improved because rapid changes in arterial oxygen tension (PaO_2) could be treated instantly, thus reducing the likelihood of damage by hypoxia or hyperoxia and allowing the selection of optimal therapy.[4]

Safe and effective use of these probes required the laboratory and radiological facilities of a busy district general hospital together with adequate numbers of competent nurses, continuous neonatal resident medical care, readily available and experienced senior medical supervision, rapid blood gas analysis, an adequate through-put of sick infants, plus the means of controlling the varying and potentially dangerous levels of PaO_2, followed by suitable long-term review.

We suggest that many larger UK towns, outside the regional centres, already possess these supporting services together with an adequate work load; and that the recent emergence of inexpensive, reliable arterial oxygen monitoring, which is relatively trouble-free if correctly used, now facilitates the safe intensive care of neonates at a local and more appropriate level than envisaged by the DHSS, without undue cost or the disadvantages and delays of long journeys and separation from mother. On a local basis such infants should of course be centralised together with their mothers in one suitably appointed unit; and at the regional centres facilities should be available for teaching and research as well as service to their larger populations.

On the other hand neonatal surgery, neonatal cardiology, and investigative paediatric neurology certainly do require the clinical material of a whole region and the facilities of a regional centre. These ultra-specialised disciplines are concerned with rarer and more diverse problems, having less immediate urgency than neonatal respiratory failure; yet they do not seem to be recognised in existing DHSS and health authority documents for adequate funding at regional centres.

J M DAVIES
JANET L P HUNTER

Grimsby Maternity Hospital, Grimsby, S Humberside

[1] Department of Health and Social Security, *Report of the Working Party on the Prevention of Early Neonatal Mortality and Morbidity*. London, DHSS, 1974.
[2] Schlesinger, E R, *Journal of Pediatrics*, 1973, **82**, 916.
[3] DHSS Health Circular (HC (76) 40), 1976.
[4] Conway, M, *et al*, *Pediatrics*, 1976, **51**, 744.

A loophole in aseptic technique?

SIR,—In total joint replacement we do all in our power to protect the wound from contamination emanating from the bodies of the surgical team, but I am wondering whether we should pay more attention than we do to the potential danger of sweat from the surgeon's hands saturating the cuff of the operating gown. This is no new idea and we ignore it on the grounds that even the role of glove puncture as a cause of wound infection has never been proved, though double gloves are now almost always used in total joint replacement.

The irony of the situation to which I wish to draw attention is that the hazard from sweat-soaked cuffs is especially great when two pairs of gloves are worn. This is because when two pairs are worn there is a tendency to