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NO MAN IS AN ISLAND (APROPOS OBSTETRIC ANAESTHESIA)

Attributed originally to John Donne, this aphorism applies also to that most neglected branch of modern anaesthesia—obstetric anaesthesia. Nor is this a new or even recent development. Right from the beginning it was thought that chloroform, however dangerous it might be in other conditions, was almost entirely free from danger when given to a woman in labour. More recently spinal anaesthesia was, for a time at least, thoroughly discredited by that deplorable practice of singlehandedly administering the spinal block and then proceeding with an operation like a Caesarean section, leaving the mother under haphazard or no supervision at all. Since this period is fraught with preventable but nonetheless lethal hazards, far too many mothers paid with their lives for this selfish and presumptuous expediency. Today such practice is nearly, but by no means entirely, a thing of the past. In addition to those rare instances of genuine emergency when a singlehanded doctor is presented with no alternative, the method of local anaesthesia administered by the operator himself for operative and instrumental delivery is still being applied in our remote as well as city hospitals.

Competent physicians or anaesthetists are often asked to be on the lookout for signs of untoward reactions with a view to their timely detection and treatment. An example of such an untoward reaction is insidious hypotension leading to cerebral anoxia and eventually respiratory arrest—the first sign to become apparent to the busy operator who, in years past, blamed respiratory arrest for the deaths when, in fact, it was a terminal event long since past the stage of easy remedy.[1] Too often, however, the temptation proves too much to dispense with the nuisance of calling and waiting for a competent anaesthetist, and to 'get on with it' under local anaesthesia.

Actually, even when trained anaesthetists are in attendance, the position is not at all clear. Firstly, obstetricians have certainly not yet accepted the modern anaesthetist to the extent that surgeons have now done for many years. Thus, Greenhill, an obstetrician, states in his book on anaesthesia: 'the selection of the drug and its dosage is an obstetrical problem of the first magnitude'.[2] Similarly, Dr. Michael, an obstetrician, recently reviewed obstetric anaesthesia in this *Journal*[3] and anticipated his British colleagues nicely by saying: 'where general anaesthesia has to be employed during labour, aspiration of the stomach contents pre-operatively by means of a gastric tube and intubation of a cuffed endotracheal tube are essential'. Finally, a group of distinguished obstetricians have just published the 'Report on confidential inquiries into maternal deaths in England and Wales 1955 - 1957'.[4] In this report is is suggested that 'it would be a wise precaution to intubate the trachea in all cases where the patient's stomach is thought to be full and where forceps delivery is to be undertaken in the lithotomy position.'

There has long been a somewhat contrary spirit among anaesthetists. Indeed, since the classical article by Morton and Wylie,[5] anaesthetists have not used the stomach tube or apomorphine, relying rather on rapid induction of general anaesthesia in the foot-down position, followed immediately by a relaxant and endotracheal intubation; alternatively purely regional (as opposed to local) blocks are used universally in premature or definitely 'depressed' babies. The safety of general anaesthesia induced with the feet down has recently been authoritatively affirmed.[6] It is interesting to note in passing that Paul Marchand found the cardiac 'sphincter' competent in the cadaver,[7] thus rather effectively ruling out a 'relaxing' effect of muscle relaxants on the lower end of the oesophagus.

It must be stressed that these 'specialist' anaesthetic methods demand a thoroughly trained and competent anaesthetist. Thus, the confidential inquiry already referred to[4], revealed that in seven of the fatalities the intention to intubate was frustrated by vomiting; and all the mothers died in the lithotomy position, or at least because they had been in this exceedingly hazardous position. There is much common-sense in Morley's view[8] that the lateral position should be adopted as a routine in domiciliary obstetrics, particularly when general anaesthesia is induced for forceps delivery without the benefit of laryngeal intubation. Indeed, even in hospitals this should be an absolute rule, unless an experienced anaesthetist is in attendance. Pre-operatively, atropine should always be combined with a phenothiazine (anti-emetic) derivative.[12]

Obstetric anaesthesia and analgesia have many facets. Not only are there always two patients whose interests are at stake, the mother and the unborn baby, but from the above it is clear that there are also two distinctly different approaches; that of the obstetrician and general practitioner on the one hand, and that of the specialist anaesthetist on the other. The former group would welcome a single, simple, and universally effective technique which can be mastered in a week or two. The modern anaesthetist prefers versatility, and prepares and selects his method with great care and careful thought. Thus he is aware that the delivery process reduces the exchange of oxygen and carbon dioxide between mother and baby, so that the baby is normally born in a state of biochemical asphyxia. Consequently, while the mildly depressant action of drugs like 'pethilorfan' and thiopentone in particular need not normally give rise to misgivings,[9] this mild action may change to one of toxicity if more asphyxia is superimposed, as happens readily in prematurity and eclampsia.[10]

The phrase 'no man is an island', which was written by John Donne and recently popularized as the title of a book by Thomas Merton, suggests to us the principle of the solution of the problem of obstetric anaesthesia. For, unless we heed the advances of medical specialties like anaesthesia and work towards the betterment of backward departments like obstetric anaesthesia, we shall surely follow in the footsteps of John Donne, at least occasionally . . . 'Madnes upon misplacing, or overbending our natural faculties, proceed from ourselves, . . . and wee are not onely passive, but active too, to our owne destruction . . .'[11]

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3. Michael, A. M. (1959): S. Afr. Med. J., 33, 469.

4. *Ministry of Health Reports on Public Health and Medical Subjects*, No. 103. (1960): London: Her Majesty's Stationery Office.
5. Morton, H. J. V. and Wylie, W. D. (1951): Anaesthesia, **6**, 190.
6. Snow, R. G. and Nunn, J. F. (1959): Brit. J. Anaesth., **31**, 493.
7. Marchand, P. (1954): Brit. J. Surg., **42**, 504.
8. Morley, A. H. (1960): Brit. Med. J., **2**, 1804.
9. Editorial (1960): S. Afr. Med. J., **34**, 6.
10. James, L. S. (1961): Anaesthesiology, **21**, 405.
11. Footnote (1959): S. Afr. Med. J., **33**, 514.
12. Sapeika, N. (1960): *Ibid.*, **34**, 49.