bony resorption of the mandible in the endentulous may be significant also.

While it is reassuring to find evidence confirming anatomical disproportions after failing to intubate the trachea, it would be more valuable to make predictive measurements on patients as part of the assessment before operation. For measurements 5 and 6, which seem to be the most useful indices, one would require only a pair of calipers and a centimetre rule.

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I am grateful to Mr N. R. Barnes, R.T., Superintendent Radiographer, for assistance with x-rays and measurements.

REFERENCE

NITROPRUSSIDE AND CYANIDE

Sir,—One of the points made by Vesey and Cole (1975) was their conviction that plasma thiocyanate concentrations are a poor indication of exposure to cyanide during nitroprusside therapy. We would like to point out that there are also pitfalls in using cyanide blood concentrations for that purpose.

We have published evidence (Smith and Kruszyna, 1975) to show that nitroprusside penetrates human red blood cells and reacts rapidly with oxy- or deoxy-haemoglobin in the interior. All five equivalents of cyanide are liberated from 1 mole of the product and one haeme group on the haemoglobin tetramer is oxidized to the ferric form. The latter is able to trap one equivalent of free cyanide in the biologically inactive form of cyanmethaemoglobin. The remaining four equivalents of cyanide are free to diffuse from the red cell and exert their characteristic effect. Although the cyanide of cyanmethaemoglobin is biologically inactive, it may be measured as part of the total blood cyanide. Until a method is devised for measuring blood-free cyanide, as opposed to total cyanide (including that fraction complexed with methaemoglobin), blood cyanide concentrations following the administration of nitroprusside must be regarded as artefactually high. After acute single-dose administration to animals, only 20% of the blood cyanide is bound in an inactive form, but it is not at all clear what the situation is in cases of prolonged continuous administration. In mice the apparent blood cyanide concentration exceeds the established lethal limit by a factor of more than two, but we have found that these animals do not die of cyanide poisoning, apparently because the cyanide is bound as cyanmethaemoglobin (Smith and Kruszyna, 1976).

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REFERENCES


AN OBSTETRICIAN'S VIEW OF PAIN

Sir,—As an obstetrician interested in developing a comprehensive obstetric analgesic service, I welcome greatly the compassionate and sensible outlook of Professor O'Driscoll's article (1975). However, I would like to make three comments.

First, it would seem unwise to base fears regarding extradural analgesia in Great Britain on the grounds of foetal blood concentrations of mepivacaine and lignocaine since these agents are rarely used; the neonatal concentrations of bupivacaine are much lower and the drug has much less tendency to cumulate (Reynolds, 1972).

Second, Morrison and colleagues (1973) have detected neonatal depression following administration of pethidine 59 mg i.v. to mothers more than 60 min and 3 h before delivery, so that the use of even small doses of pethidine appear to have immediate deleterious effects; other studies quoted by Dubovitz (1975) suggest that long-term neurological deficits are attributable to the use of pethidine in labour.

Third, I note with some surprise the preference of pudendal block to extradural block on the grounds of maternal safety. Whatever Professor O'Driscoll's reservations concerning the accuracy of reporting of disasters attributable to extradural analgesia, it cannot be denied that one death has been attributed to pudendal block by the confidential enquiry into maternal deaths covering the years 1964 to 1966. (A further death attributable to pudendal block was almost certainly a result of the accidental use of 1 : 1000 adrenaline with the local anaesthetic.) Since the introduction of an extradural service at Lewisham Hospital we have seen no evidence of any tendency on the part of our obstetricians to prolong labour in a traumatic manner. Nevertheless, Professor O'Driscoll's warning will be heeded by all. Our unit has welcomed the virtual disappearance of the need for general anaesthesia on the labour ward, largely as a result of the availability of extradural analgesia.

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REFERENCES


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