Correspondence

Letters to the Editor should not exceed 500 words.

Ruptured Uterus after Buccal Oxytocin

SIR,—We have just had an opportunity of studying your issues containing records of rupture of the uterus following buccal oxytocin (12 September, p. 689, and 3 October, p. 876) and your leading article (19 September, p. 705).

Since we began our study of this method we have induced 206 cases with what Mr. H. O. Nicholson (3 October, p. 876) describes as the "Worcester course." During this time we have had four cases only of hypertonicity of the uterus, and in all of these relaxation followed rapidly after removal of the tablets from the mouth and washing out with cold water. In none of these was the foetal heart disturbed, and in 17 cases which had shown some disturbance of the foetal heart primary abnormalities of the placenta such as infarction, calcification, etc., were observed, as reported in a paper read last week to the Fourth World Congress of Obstetrics and Gynaecology at Mar del Plata, Argentina.

We have felt, however, that the dosage was unnecessarily large, and therefore for the last 12 months we have been experimenting with lower dosages. Starting with a dose of 50 mg. instead of 100 mg., and a build-up leading to half the original total, we have treated 100 cases with 79% success, and no instance of hypertonicity. In an attempt to reduce the dosage still further, the most recent series, now amounting to 17 cases with 100% success, has used an initial dosage of 25 units. In this most recent series the total dosage required for each induction has averaged 837 units. It may be that we shall be able to reduce the dosage still further, but our study continues and we hope to publish our results in the course of the next few months. In 323 cases, therefore, we have had only four instances of uterine hypertonicity, which were easily controlled by removing the tablets and washing out the mouth. There has been no rupture of the uterus and no case in which we were unduly anxious about the foetal heart. In your leading article you stress the necessity of careful selection of cases and of close and continuous observation in a fully equipped hospital maternity unit. We are, of course, entirely in agreement with this, and indeed pointed it out in our recent paper.¹

In Mr. P. M. Leney's case (12 September, p. 689) it seems probable that the rupture of the uterus occurred not less than two hours after the completion of her course of buccal oxytocin, and this therefore may have been spontaneous rather than due to the therapy. In the case reported by Mr. Nicholson, however, the rupture of the uterus seems to have followed more closely on the completion of the course of treatment, and one cannot so clearly exculpate the drug in this instance.

While we would not wish to minimize the seriousness of even a small number of cases of uterine rupture, we would point out that spontaneous rupture of the uterus does occur

without medication. We feel that it would be a pity if a valuable method were to be abandoned, and we believe that buccal oxytocin offers a method of induction which has many advantages over the intravenous drip, and—particularly in the reduced dosage which we are now using—appears to be safe provided the same careful supervision required for any oxytocin induction is employed in this field also.—We are, etc.,

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REFERENCE

- ¹ Spence, D. N., and Chalmers, J. A., *Lancet*, 1964, 1, 633.

Surgery for Peptic Ulcer

SIR,—I would like to comment on Mr. H. W. Burge's criticism (12 September, p. 687) of the paper in which I compared the results of the insulin and electrical stimulation tests for completeness of vagotomy.¹

(1) Mr. Burge refers to my failure in three cases to obtain any pressure response to electrical stimulation before vagotomy, and he mentions various factors which may adversely affect the response to stimulation. Anticholinergic drugs were not given as premedication to any of the patients in my series, and halothane was not employed. It is true that D-tubocurarine was used as relaxant instead of gallamine triethiodide, although this did not prevent a satisfactory response to stimulation in 22 of my 25 cases. The electrode which I used was the one manufactured to Mr. Burge's specification in 1959. I note that he now uses an electrode of rhodium-plated silver, and possibly this new electrode would have given a response in every patient.

(2) He states that no trunk can remain outside the ring electrode if the coeliac division of the posterior nerve is felt. This is not supported by the recent anatomical study of Ruckley,² who found one case with two coeliac divisions, one of which descended on the right crus of the diaphragm, and another case with a high bifurcation of the posterior vagus.

(3) Mr. Burge says that by the use of his test 30% of patients will have nerve trunks divided which would otherwise be left intact. This was not our experience, because in no case did we obtain a response to stimulation after severing all strands of nerve which could be located at the initial careful search. Even when the test is used, it is still necessary to see or feel the nerves in order to divide them. If every visible or palpable strand is divided, what more can be done?

(4) Even the most experienced vagotomists report around 10% of patients with incomplete nerve section as judged by the insulin

test. As I have previously suggested³ this hard core of "incomplete vagotomies" may have parasympathetic secretomotor fibres reaching the stomach by extra-vagal pathways. Mr. Burge has yet to tell us what proportion of his cases have a positive response to the insulin test. Until he does so his claims for the electrical stimulation test remain unsubstantiated.—I am, etc.,

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J. P. LYTGOE.

REFERENCES

- ¹ Lythgoe, J. P., *Brit. med. J.*, 1961, 1, 1196.
- ² Ruckley, C. V., *Brit. J. Surg.*, 1964, 51, 569.
- ³ Lythgoe, J. P., *Brit. med. J.*, 1961, 2, 244.

SIR,—May I suggest that section 4 of Mr. H. W. Burge's letter (12 September, p. 689) is invalid and on this point hinges the main argument against using the stimulator test.

The purpose of the test is to pick up vagus-nerve fibres which are not palpable, but yet are sufficiently large to cause gastric stimulation. If such fibres form an important part of the anterior nerve then they must also be expected to accompany the main branch of the posterior nerve.

If a special test is necessary to identify such fibres in a relatively exposed position on the oesophagus, how can Mr. Burge claim always to find them when they may be running behind and amongst the fibres of the right crus?—I am, etc.,

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Umbilical Cord

SIR,—Your leading article on the umbilical cord (1 August, p. 264), discussing the greater chance of a baby requiring resuscitation if it is born with the cord round the neck, states, "Perhaps here again spasm of the vessels is the trouble rather than compression, strangulation, or the premature separation of part of the placenta owing to the relatively short cord pulling on it during descent of the foetus." The following cases are of interest because they lend support to this statement.

Case 1.—Multigravida. Normal pregnancy and labour. Birth weight 7 lb. 13 oz. (3.55 kg.). Cord three times round the neck. Total cord length 74 cm. Available cord length 10 cm. (4 in.).

Case 2.—Primigravida. Normal pregnancy and labour. Birth weight 6 lb. 11 oz. (3.04 kg.). Cord twice round the neck. Total cord length 63 cm. Available cord length 16.5 cm. (6½ in.).

Case 3.—Primigravida. Normal pregnancy and labour. Birth weight 7 lb. 10 oz. (3.46 kg.). Cord once round the neck. Total cord length 48 cm. Available cord length 19 cm. (7½ in.).

Case 4.—Primigravida. Normal pregnancy and labour. Birth weight 6 lb. 12 oz. (3.06 kg.). Cord once round the neck. Total cord length 52 cm. Available cord length 23 cm. (9 in.).