## LETTERS TO THE EDITOR

DEAR SIR:

In 1966 Dr. P.A. Charlebois drew attention to the problem of Coring. Recently, after changing an empty flask for a full one of 500 ml %-% solution manufactured by the Cutter Company, a piece of the flask diaphragm was noticed to have passed through the introducer into the Giving Set Tubing. A picture of this material in the tubing of the Giving Set is enclosed. Figure 1.



It was fortuitous that this was noticed, as the patient had a No. 16 Argyle Medicut in place intravenously and attached to the tubing. The "core" could have passed with ease through this cannula, and a further picture is enclosed to illustrate the potential hazard of embolization under this circumstance. Figure 2.



One wonders how often this phenomenon actually occurs in clinical practice, whether the Cutter Company is presently aware of this problem, and what can be done to remedy it?

This illustrates the maxim that eternal vigilance is the price of safety.

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## LETTERS TO THE EDITOR

DEAR SIR:

Concerning the paper entitled "Concentration of Lidocaine Hydrochloride in Newborn Gastric Fluid after Elective Caesarean Section and Vaginal Delivery with Epidural Analgesia," Canad. Anaesth. Soc. J., 22: 79 (1975), by S. Datta, G.L. Houle and C.S. Fox, I would like to suggest a possible explanation for the differences found between the vaginal and the caesarean delivery babies in regard to the gastric pH and lidocaine concentrations.

Dr. G.B. Avery and associates showed evidence that the newborn at birth secretes a strongly acid solution in the stomach.<sup>1</sup> In comparing the gastric pH and volume in infants delivered vaginally and by caesarean section, they observed a slightly increased volume and significantly higher average pH in gastric content of the caesarean infants within 15 minutes after birth. However, as soon as the initial content was removed, a significantly more acid secretion was noted. These investigators considered caesarean infants to have greater amounts of alkaline amniotic fluid in their stomachs at birth, in contrast to the vaginal delivery babies, because they had not been subjected to abdominal compression by the birth process.

It would seem that, in Dr. Datta's study, the significantly higher mean pH value, and the significantly lower mean lidocaine concentration in the gastric content of the neonates delivered by caesarean section, may simply reflect the dilution effect of a greater amniotic fluid volume in the stomach of these babies in comparison to the vaginal delivery neonates. This possibility may have been realized if the authors had measured the volumes of gastric content aspirated in both groups.

In view of this explanation, gastric lavage for the treatment of neonatal lidocaine intoxication would apply about equally for both vaginal and elective abdominal delivery infants, once the initial gastric content was removed.

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## REFERENCES

1. AVERY, G.B., RANDOLPH, J.G., & WEAVER, T. Gastric acidity in the first day of life. Pediatrics 37: 1005 (1966).

DEAR SIR:

Doctors Browne and Catton have presented a valuable description of "The Use of Intrathecal Phenol for Muscle Spasms in Multiple Sclerosis" (Canad. Anaesth. Soc. J. 22: 208, 1975). We have attended a similar patient and followed a different yet successful, approach to treatment. We would appreciate an opportunity to describe our management and present our reasons for recommending surgical neurectomy and tenotomy.

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Our patient was 41 years of age and had suffered progressive multiple sclerosis for 14 years. All modalities of sensation in the lower extremities were grossly impaired. Spastic flexor paralysis of the muscles of the hips and knees had forced this patient into a contorted position which confined him to bed and obliged him to rest only on his side. Before his referral to our service he had developed large ulcers over each greater trochanter. He had lost bladder function, but had preservation of bowel control.

After examining the patient we performed a femoro-sciatic-obturator block on the right side with lignocaine and tetracaine. This procedure allowed extension of the hips and knees to within 15 degrees of the neutral position. The limb remained flaccid for 6 hours. With the enthusiastic support of the patient and his family, the block was repeated on the left side with an identical result.

In deciding upon the preferred treatment for this patient, we discussed several alternatives. These included:

(a) Intrathecal Phenol: Our patient feared the loss of bowel control and treasured the marginal independence he still possessed. Respecting this concern we decided not to perform an intrathecal block even as a diagnostic procedure with local anaesthetics lest there be even a coincidental loss of rectal function as his disease advanced.

We were concerned also that his relief from spasticity might be temporary and would demand repeated blocks as did the patients described by Drs. Browne and Catton.

(b) Rhizotomy: This treatment would require an attack upon multiple nerve roots bilaterally and was not attractive.

(c) Peripheral Phenol Blocks: Both the femoral and sciatic nerves are large and complete relief of spasticity could not be guaranteed.

(d) Motor-Point Block: This technique did not seem appropriate because of the multiplicity of muscles involved.

(e) Amputation of the Spastic Limbs: This procedure is profoundly and unnecessarily mutilating.

(f) Surgical Neurectomy and Tenotomy: The patient had experienced peripheral nerve blocks and could anticipate the results of surgical therapy. He realized that he would experience prompt and total flaccidity with what was for him the small cost of total sensory loss.

After consultation with anaesthetists in other centers of pain treatment and a thorough discussion of the various forms of treatment with the patient, we recommended peripheral neurectomy of the femoral and sciatic nerves with simultaneous adductor tenotomies. These procedures have been carried out under general anaesthesia without any deleterious sequelae and have produced a very gratifying result for the patient and for those attending him.

We would encourage other anaesthetists to consider peripheral neurectomy in managing problems of flexor spasticity in patients with multiple sclerosis who still possess bowel or bladder control.

> R.K. Calverley, m.d., f.r.c.p.(c) Esther Janowsky, m.d.

## LETTERS TO THE EDITOR

DEAR SIR:

A very recent communication from the Executive of the Canadian Anaesthetists' Society includes "Guidelines for the Minimal Standards of Practice of Anaesthesia," approved by the Council of the C.A.S., February 1975.

On page 5 of the communication under <u>Pre-Anaesthetic Period</u> there is a paragraph reading: "A policy should be followed concerning the minimum delay from the time of the last oral intake to the induction of anaesthesia for elective surgery. While a complete emptying of the stomach can never be guaranteed, a minimum time of five hours in the absence of pain, trauma, apprehension, narcotics, gastrointestinal disorders or medications is suggested except under emergency conditions. The same rules should apply for regional anaesthesia.

"Emergency surgery should be undertaken taking into consideration the risks of delaying surgery versus the risks of aspiration should anaesthesia be induced."

The underlined statement is the part of the policy with which I disagree.

Many patients who are booked for elective operations under regional anaesthesia such as brachial plexus and intravenous blocks are better prepared having their regular medications and food intake than without – the most frequently encountered being diabetic, hypertensive and aged people. Patients are more at ease mentally and have less upset physiologically the less their daily habits are altered.

Regional anaesthesia offers the safest form of anaesthesia for many patients because of the slight upset to the bodily functions. If the regional method is such a failure that general anaesthesia is felt necessary then the operation must be postponed. A policy requiring hundreds of patients each year to go through unnecessary discomfort for the few failures seems a narrow-minded decision and poor medical judgment.

Surely the advantage of regional anaesthesia for emergency surgery is that the operation may be started with dispatch giving the patient early relief and repair.

Fasting is not required for safe regional anaesthesia in my opinion following 30 years in the practice of anaesthesia.

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