Canad. Med. Ass. J.
Feb. 3, 1968, vol. 98

SHORT COMMUNICATION

A Simplified Technique for Jejunal Biopsy in Infants

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NOWADAYS, jejunal biopsy is a routine clinical procedure, and is relatively easy in adults; but it is a complicated and time-consuming procedure to perform on children regardless of the type of capsule used. As a matter of fact, most capsules are connected to rubber or plastic tubes which are large and semi-rigid.[1] Once inserted in the stomach, the capsule is usually pushed beyond the pylorus under fluoroscopic observation. This procedure demands time and patience from both the doctor and the patient; the former needs ability and the latter needs to be able to co-operate. On the other hand, the Carey capsule,†[2] once swallowed, is very easily tolerated even by children and has a big advantage in that it propels itself into the jejunum.[3] In this way, neither the young patient nor the doctor need undergo exhausting procedures.

In our opinion, Carey's capsule, because of the numerous advantages it presents, should be used in preference to others, particularly in the case of infants and children, where the risks involved are greater. It seems to be obvious that the capsules which are activated by a hydraulic mechanism are more dangerous,[4, 5] as the intestinal wall is particularly thin in the case of young children. Injury to the pylorus has also been reported with capsules attached to semi-rigid tubes.[6] The Carey capsule presents the advantage of being attached to a small polythene tube. A voluntary act of swallowing is, however, necessary, which is difficult to obtain not only from children, but also from the aged or the mentally retarded. Carey[2] has recently described a method for children which seems less advantageous than that which we use. Our method, described here, eliminates the principal inconvenience of Carey's capsule by making the introduction easier. Accordingly, its use is advised where there can be no co-operation from the patient. The youngest patient on whom a biopsy was performed was 9 months of age and weighed 13 pounds.

Our method does not require a more difficult introduction of the capsule than other methods with semi-rigid tubes and the advantages of Carey's technique are also conserved in that, once swallowed, the capsule is easily tolerated.

MATERIAL

In this technique the following items are used:

1. One tube of plastic material No. 10 (Portex) (inside diameter 10 mm.) used by anesthetists for endotracheal intubation. This is used for esophageal intubation (Figs. 1 and 2).

2. One Levin tube, No. 18 (inside diameter about 4 mm.), from which the ends are cut. Through this tube, the small polythene tube (inside diameter 1.19 mm.), which is attached to the capsule, is introduced. The modified Levin tube serves as a support to the small tube and in this way aids the introduction of the capsule into the stomach. The Portex tube is guided over the two tubes until the capsule rests against it. The Portex tube serves as a guide through the superior part of the esophagus and is then withdrawn.

3. The bag attached to the capsule contains half the usual quantity of mercury (0.5 c.c.).

4. A little spring provided with the Carey capsule is not used.

METHOD

1. The young patient receives a light premedication in the form of dextromethorphan hydrobromide, 1 mg. intramuscularly per kilogram of body weight, or other similar drug. The patient has fasted since midnight. The blood coagulation tests (prothrombin time, bleeding time, coagulation time and platelet count) should be performed to ensure that the patient is suitable for a jejunal biopsy.

2. The young patient is placed on his left side and the hypopharynx is painted with a 4% solution of lidocaine hydrochloride (Xylocaine) by the operator.

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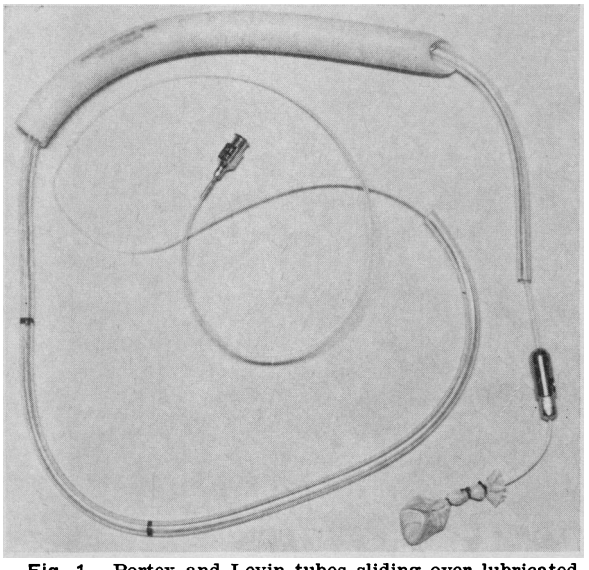

Fig. 1.—Portex and Levin tubes sliding over lubricated polythene tube.

3. The needle is removed from the polythene tube which, lubricated with mineral oil, is placed into the Levin tube No. 18 (Fig. 1).

4. The Levin tube is guided over the small polythene tube until the capsule rests against it. The same procedure is used to introduce the two tubes into the Portex tube.

5. The Portex tube is introduced into the hypopharynx in the same way as is a gastroscope, that is, by passing the epiglottis posteriorly. (The patient's tongue is controlled by firm pressure of the left index finger, and the Portex tube is advanced with the right hand until it has passed the cricopharyngeal sphincter.)

6. Afterwards, using the Levin tube as a support to the small polythene tube, the capsule is pushed slowly into the esophagus. When the capsule has reached the stomach, the Portex tube is rapidly withdrawn, and this is followed by withdrawal of the Levin tube. The Levin tube should be removed very carefully because the rest of the unit may be inadvertently withdrawn.

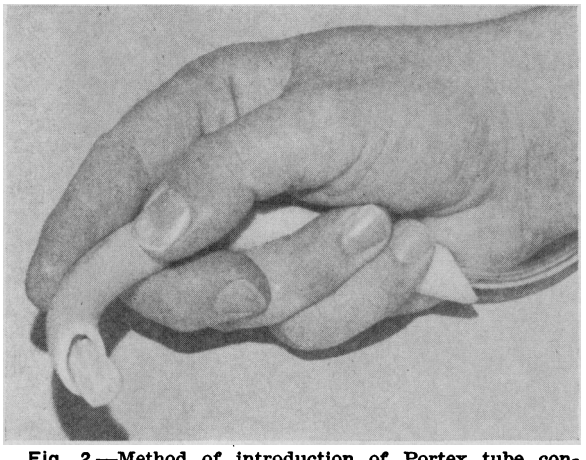

Fig. 2.—Method of introduction of Portex tube containing Carey capsule.

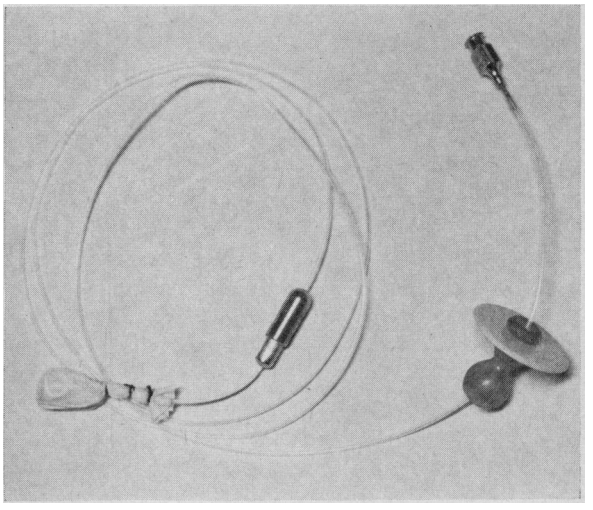

Fig. 3.—Modified pacifier to protect the polythene tube from being bitten.

7. The patient is then returned to his room, where he is watched by a nurse. He is placed in a partial right lateral decubitus position, his hips elevated by a small cushion. He is given soft drinks (e.g. ginger ale) regularly, in order to promote peristalsis. The child is prevented from biting the polythene tube by fixing a small rubber drain in the corner of his mouth, or by giving him a pacifier through which the polythene tube is passed (Fig. 3).

8. After a few hours the patient is returned to the radiological department, and a plain radiograph of the abdomen is taken. If the capsule is at the proper place in the jejunum, the biopsy is undertaken immediately under fluoroscopic observation.

Summary A relatively simple technique of practising jejunal biopsy on children, using Carey's capsule, has been described. In order to put Carey's capsule into the stomach of a child, an endotracheal tube is used as a guide in the superior esophagus and a Levin tube as a support for pushing the capsule towards the stomach.

Résumé La biopsie jéjunale est devenue une technique facile à exécuter chez l'adulte mais elle reste relativement plus compliquée chez le petit enfant qui, évidemment, n'apporte pas de collaboration.

Or la capsule de Carey présente des éléments de sécurité que n'ont pas les capsules hydrauliques et, une fois dans l'estomac, elle est facilement tolérée par les enfants. Les auteurs décrivent une nouvelle méthode de faire avaler cette capsule en employant un tube endotrachéal d'anesthésiste comme guide

dans l'œsophage supérieur. Le plus petit malade chez qui une biopsie fut prélevée pesait 13 livres et était âgé de 9 mois.

We wish to thank G. H. Kimbell, Ph.D., H. Robidoux-Poirier, R.N., R.-M. Leblanc, R.N., D. Michaud, R.N., and Marc Giguère, R.B.P., for their co-operation and active assistance.

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CASE REPORT

Primary Mixed Myosarcoma of the Uterine Tube:
A Case Report and Review of the Literature

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SINCE primary malignant neoplasms of the uterine tube are so rare that no one individual or clinic has been able to study a large series of patients, the importance of reporting every case has often been emphasized.[2-4] Although over 800 cases of primary carcinoma of the tube have been described in the literature,[4] up to 1956 only 30 authentic cases of primary sarcoma had been reported and to this number Abrams added another one.[1, 8] Recently we had the opportunity to study a patient with primary sarcoma of the fallopian tube.

L.C., a 48-year-old coloured gravida 0, para 0, who had her menopause five years before, was first seen in our clinic on January 9, 1964. She stated that she had had vaginal bleeding two weeks previously and this had lasted for about one week. Pelvic examination showed a small amount of bleeding from the cervical os. The uterus was thought to be enlarged to the size of a two- or three-month pregnancy and it was palpable in the cul-de-sac. Her past history revealed that she had been adequately treated for syphilis eight years previously. Although her VDRL test for syphilis was still positive, it was believed that she was a serological-fast individual and no further treatment was necessary. Her hematocrit was 33%, and her white blood count 7150 per c.mm.; the urinalysis was negative. On

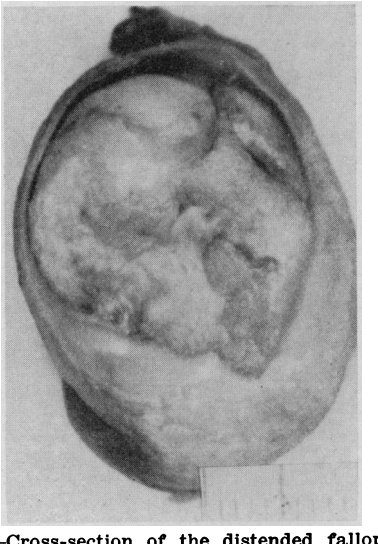

Fig. 1.—Cross-section of the distended fallopian tube with tumour protruding from the lumen (measure in centimetres).

January 20, a dilatation and curettage was performed. Although the sound was passed to a depth of 5 inches, only a small amount of curettings was obtained, and this consisted of mucous material and a few small fragments of endometrial glands. During the following four months she felt generally well, although she complained of occasional uterine bleeding. On June 4, she experienced a sudden onset of lower abdominal pain which increased in severity. Her abdomen became markedly distended. On pelvic examination, the findings were essentially the same as before, but now the mass in the cul-de-sac was very tender. The most likely diagnosis

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