

isolated or quarantined, and the value of health guidance shown parents and children. They do bedside nursing in nursing-visits, but many times this is delegated to a special group, called *visiting nurses*.

In India, splendid work has been done in the education of women as the universities, colleges and secondary schools attest. Now the return of this great opportunity into service to the people is the call of the world to-day. What are you giving for what you receive? No country, so much as India and China, demands the work of trained women in medicine and nursing. The field is yours. Your education as nurses demands the same excellent standards that the scholastic branches have. The nurse learns in the laboratory *i.e.* the hospital, and is deserving of the best equipment and best teaching for her training, not to get hospital work done, but to *educate* nurses for the sick is the ideal of a training school. Your alumnae associations can help to keep this ideal clearly before the various schools of nursing.

RECTAL ANAESTHESIA

BY MYRA L. SAWYER, R. N. *in the Quarterly Journal*
for Chinese Nurses.

THIS method of anaesthesia is of particular value in those cases where the oral method is inconvenient, as operations on face, eye enucleation, mouth, neck, ear, and where one has not the apparatus for giving vapor direct into the respiratory tract. Also it may be used where the patient has a chronic respiratory trouble, as asthma, or in pulmonary tuberculosis if not too advanced. It should not be used on the aged or small children or for exceedingly weak patients where an oral anaesthesia would be a doubtful venture.

PREPARATION OF PATIENT:

On the afternoon of the day before operation, two hours before the evening meal, give Castor Oil, two ounces. Two hours later the patient may have two bowls, sixteen ounces of strained cereal. If operation is likely to cause loss of blood or if patient is already anaemic, unless there are contraindicating conditions patient should have eight ounces of water to drink hourly from noon till 9 P.M. (half hourly if especially in need of fluids), and whenever awake during night till 3 A.M. Four hours from the time the Castor Oil was given administer a 2 qt. Soapsuds enema.

If the operation is set for 8-45 or 9 A.M., at 4 A.M. give another S. S. enema, repeat at five and at six give 1 qt. of Saline Solution. If the operation is set earlier start the enemata that much earlier, if later, *vice versa*. After the saline enema patient should rest quietly at least an hour before giving the first dose of anaesthetic,

Before starting the anaesthetic the patient should either void or be catheterized according to the nature of the operation, be put in a quiet room alone with her nurse, lying on the left side, knees flexed, on the stretcher cloth, low pillow under head, anus exposed between blankets. The operating room clothes should be all on, so there will be no need whatsoever for moving patient until sent to operating room. A high rectal tube is inserted and left in place from this time until patient is returned to ward after operation. Any retained enema water will flow out through this during the last quiet quarter or half hour, it is in place for the administration of ether or for possible needed siphonage of ether in collapse, and for the final cleansing enema given on return to the ward. It should not be allowed to slip out, as continued adjusting will set up peristalsis.

UTENSILS REQUIRED :

Shock blocks, a foot or more high. Hypodermic outfit. Morphine, atropine, chloretone, ether, olive oil, or mineral oil (liquid paraffin), a six or eight-ounce measure, a pint measure, stirring rod, funnel, three or four feet of rubber tubing, glass connector, Chinese cotton, a large towel. From this time patient should not move or talk; there should be no commotion in room and he must not be left alone. Pulse and respiration should be counted and recorded every 15 min. and any sudden change be reported to doctor or supervisor as though oral ether were being given.

ETHER MIXTURE :

The *quantity* given is computed according to patient's weight, and the *strength* is computed according to the patient's age, physical vigor, sex, and presence of heart, kidney or lung complications. According to the strength used the patient will sleep from 2 to 3 hours. After the operation on return to the ward, the head of the bed should be elevated and all the residue irrigated out of the bowels with tepid saline, not hot, as that would increase the absorption of ether. Irrigate till no ether or oil can be detected in flow.

PROCEDURE :

The evening before the operation put the required amount of Chloretone, with the olive oil or mineral oil, in a graduate measure glass and cover until morning as it dissolves slowly. When time for the first injection, elevate the foot of the bed. Add the ether to the Chloretone and oil, attach funnel to rectal tube and drop by drop inject. The towel should now be thrown lightly over the patient's face and patient instructed to close eyes and relax as if going to sleep and on no account to move. A half hour later a hypodermic of morphine and atropine is given. One hour later inject the rest of the ether and oil mixture, this time using the longer tube attached to the rectal tube, giving it at the rate of rapid drop. If it is seen returning in the glass connector between the rectal tube and the longer

tube, wait a moment until it disappears, then go on. To force it too rapidly will bring on peristalsis and defeat the purpose. Patient should by this time be practically oblivious to this injection, if previous treatments have been given properly. On the average it may take ten minutes, sometimes less, seldom longer, to give all of the ether and oil mixture. When all has been given, tie the rubber tube into a knot and fasten it to the clothing in front, being careful to leave rectal tube fully in its place. Patient may go to operating room in 30-45 minutes from the time the ether-oil mixture injection was completed. Very occasionally if a weak mixture has been used a whiff or two of oral ether may be needed to start the operation but if a strong mixture has been used it would seldom if ever be necessary and might have an element of danger, since the patient supposedly has a sufficient quantity of ether in the system.

If patient should show signs of shock or other indication of too deep anaesthesia, the rectal tube should be untied and the mixture allowed to flow off and saline irrigation used to syphon. If mixture is properly computed this should not occur as a result of anaesthetic. Of course if shock results from operation, it must be combatted just as though the patient had been taking oral ether, and it is easier to get the residue ether and oil out of the rectum than it would be to remove it from the lungs. Nurses must keep to the exact fraction of the amount ordered by the doctor.

Chart orders for Rectal Anaesthesia.

- July 20, 4-30 P.M. Castor oil, oz. 2
6-00 P.M. Cereal strained, oz. 16.
Water ad lib. to 3 A.M.
9-00 P.M. S. S. enema, 4 pints.
- July 21, 4-30 A.M. S. S. enema, 2 pints.
5-30 A.M. S. S. enema, 2 pints.
6-30 A.M. Saline enema, 2 pints.
8-00 A.M. First dose of Ether, Oil, and Chloretone.
8-30 A.M. Hypodermic Inj. Morphine and Atropine.
9-30 A.M. Second dose of Ether, etc.
10-00 A.M. To operating room.

All dosage strictly according to Doctor's orders.

SPECIAL NOTICE

We regret to inform readers that the Hon. Secretary and Treasurer, Mrs. Chesney, is seriously ill and in hospital. She is quite unable to attend to T. N. A. I. business. Miss Gadsden, General Hospital, Madras, has kindly consented to act as Hon. Secretary and Treasurer for the present and all communications for the Secretary should be sent to her.