NURSING CARE OF THE ACUTE ABDOMEN IN CHILDHOOD

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Reception and Pre-Operative Care

Treatment before and after operation varies with the age and condition of the patient, but on the whole, follows a recognizable pattern in each instance.

The patient is received into a clean, warmed bed, in a warm but well-ventilated cubicle or small ward. Screens should be placed round the bed to create a quiet atmosphere. The temperature, pulse and respiration rates should be taken and recorded. In addition the pulse rate is charted quarter- or half-hourly. A specimen of urine should be obtained, tested and charted. The patient is now left to rest, until the surgeon has examined him, in the care of a nurse whose duty it is to soothe and comfort and also to observe the child’s behaviour.

Meantime the parents are interviewed, given all possible reassurance, supplied with details of hospital routine and told when to telephone and when future enquiries may be made. Written permission for operation and anaesthetic should be obtained.

The nurse now assembles all that is required for preparing the patient for operation so that no time is lost once the surgeon’s decision to operate is made. Bathing should be reduced to a minimum and skin preparation may be carried out in the theatre. The drug ordered as pre-medication is given with care and accuracy.

Children are particularly sensitive to atmosphere, and during this period of preparation, and until the child is anaesthetized, the nurse must use her skill in handling her patient. Much comfort may be derived from gentleness and sympathy, so that the child will face the ordeal, if not with confidence, at least in a state of reduced tension.

Post-Operative Care

On return to the ward after operation, the unconscious patient should be placed in the dorsal position with head to one side in order to maintain a free air-way. The nurse must remain with the patient to record pulse rate, observe colour and respirations, to make sure that the dressing is in position and that there is no haemorrhage from the wound. She should also give reassurance when the patient awakes. In case of need, bed blocks should be to hand and oxygen apparatus ready for use. The possible use of intravenous therapy should be borne in mind. The surgeon’s instructions concerning the giving of post-operative narcotics should be ascertained and carried out as directed.

The face and hands are sponged lightly, the mouth treated, pressure areas massaged, a clean, fresh gown put on and the bed made. A bed pan or urinal is given and the patient encouraged to use it; the amount of urine passed should be recorded. Sips of glucose water may now be given if not forbidden by the surgeon and if the tendency to vomit has disappeared. Restlessness and anxiety in the patient’s demeanour indicating the presence of pain may be treated at this point by giving the drug ordered for this purpose. If in addition to the state of physical comfort so created, and the encouragement given by the nurse, the child is now further reassured by a glimpse of his parents, it is likely that sound sleep will follow, from which the patient will wake, refreshed and much stronger.

After the first 24 hours, in uncomplicated cases, glucose fluids by mouth can be increased and added to by introducing milk and semi-solid foods. If these are tolerated well then a fairly rapid return to a light nourishing diet will be possible and will probably be complete by the third day.

This return to a full diet will encourage bowel movement and tend to render the use of aperients and enemata unnecessary. If encouragement to evacuate the rectum is necessary then the introduction of a glycerine suppository will usually prove sufficient.

The dressing, if satisfactory, is left undisturbed until the sutures are removed. Movement of lower limbs in bed and breathing exercises should be encouraged. The child may be allowed to sit out of bed on the fifth or sixth day but not allowed up or home until the sutures have been removed. After the first 12 hours or so the half-hourly pulse chart may be discontinued and re-
corded four-hourly along with the temperature and respiration rate. A fluid intake and output chart should be maintained while fluid diet continues. Urine specimens are tested at two-day intervals and bowel movements observed and recorded. Antibiotic therapy, if carried out, must be carefully recorded.

Visiting by parents may be allowed daily, and the mother encouraged to help in small ways with the nursing of her child. The nurse can do much from the third day onward to help bridge the gap between the acutely ill and convalescent stages. An acutely ill child is reasonably easily managed, but following that general weakness may cause fretfulness and irritability which makes management in the interim period difficult. By securing adequate sleep for her patient, building up energy in well-balanced meals and in keeping him occupied mentally with interesting pastimes, the nurse will encourage the child well on the way to convalescence. On discharge, a holiday by the sea or in the country is advisable before return to school.

Acute Appendicitis with General Peritonitis

In addition to the pre- and post-operative treatment laid down above the nurse deals with a child who is more acutely ill in every way. Typically he is suffering from a marked toxaemia, with profuse vomiting, distended abdomen, pyrexia of 103° to 105°F., rapid and thready pulse rate. There may be some degree of intestinal paralysis and a danger of complete paralytic ileus occurring. As part of the pre-operative treatment, a gastric lavage may be ordered and immediately prior to operation a Ryle’s tube may be introduced into the stomach and left there. At the same time intravenous infusion of dextrose in saline may be started. Nothing is allowed orally, therefore mouth toilet should be performed with care every four hours. Management of the intravenous infusion, aspirating the gastric contents two- or four-hourly, or supervising the running of a continuous suction apparatus will form only part of the nurse’s duty in the first days following operation. Important too is the fluid intake and output record; any failure to balance must be reported so that adjustment may be made if necessary.

A child with a high temperature and toxaemia may be delirious, alert, and apparently wide awake; nothing is more beneficial to such a child than prolonged restful sleep. This may be encouraged by cool sponging and a change of clothing, followed by a sedative drug if ordered. The nurse’s observations of her patient will help detect at the earliest moment signs of further complications. For example, absence of bowel movement and sounds, no flatus passed, increased abdominal dis-
tension and distress and increased gastric fluid will suggest complete paralytic ileus. Or diarrhoea with or without frequency of micturition together with intermittent temperature reported at once may lead to detection of a pelvic abscess.

Gastric drainage and intravenous fluid should be continued until the condition subsides and bowel sounds are normal. Then the nurse must cut off gastric suction temporarily and allow small amounts of fluid by mouth, at the same time reducing the rate of flow of the intravenous saline. Only when the oral fluid is tolerated well, without vomiting, and the amount has outbalanced that introduced intravenously, will the Ryle’s tube be removed and the saline be discontinued.

Acute Intussusception

In an early classical case the child is usually a well-nourished healthy individual of excellent stamina, but suffering acutely from shock. Once the operation has been performed and the shock treated recovery is likely to be rapid. The nursing care follows the same general lines set down above in treating the uncomplicated acute appendicitis. Special note is taken of bowel movements and care observed in re-instituting normal feeding. Glucose in water only may be given on the first day, and replaced slowly by first half-cream and then by full milk feeds on the third day. Sutures should be removed on the seventh to tenth day as directed and the child is then discharged home.

The nurse will see that the mother is given a carefully planned diet sheet for her child which will carry him safely over the weaning period during which some danger of recurrence of intussusception may exist from the introduction of unaccustomed foods. Supervision of diet may be arranged for at the local Child Welfare Centre. In well advanced cases surgical treatment may include resection of gut. This will lengthen and alter the pattern of the nursing care considerably. Several doses of Inj. Papaveretum B.P.C. may be given at six-hourly intervals to promote complete rest. Nothing at all will be given by mouth in the first 24 hours, and the return to full cream milk will be much more gradual. Intravenous fluids will be given and where there is abdominal distension and a tendency to vomit, aspiration of gastric contents may be instituted. A course of antibiotics may be ordered and the nurse will help to control secondary infection by careful technique in handling the baby and in carrying out all special treatments.

Neo-Natal Obstruction

This condition calls for competent nursing throughout; not only is this infant suffering from acute intestinal obstruction with abdominal dis-
tension, complete constipation, severe vomiting, but he is newborn, small and fragile and particularly vulnerable to infection.

Immediately before operation intravenous infusion of a suitable saline solution will be started and a gastric tube inserted through which fluid will be aspirated at one- or two-hourly intervals. It is the nurse’s duty to supervise the running of the intravenous infusion before, during and after operation and to continue gastric aspiration as directed. A fluid balance chart must be maintained with great care and accuracy. Especial care should be taken to keep the continuous flow of fluid at the exact rate ordered.

During operation, the infant, clad in loose woollen clothing, should be kept warm by placing him over a hot water bottle suitably wrapped in a blanket on the operating table.

After operation the patient should be returned to a cubicle which is kept at a temperature of 75°F and placed in a cot warmed with hot water bottles. Care should be taken to place these bottles in the cot so that they are never in direct contact with the child. Care must also be taken to avoid over-heating the infant; a two-hourly temperature chart should be kept. Oxygen and stimulants should be at hand if required. Complete rest should be given this patient as far as the intensive treatment will allow. Injection Papha-eretum B.P.C. may be ordered post-operatively and nothing at all by mouth until the condition improves and distension is reduced. The fluid chosen for intravenous administration should depend on the state of the blood chemistry, but this saline solution is often replaced after a time by a high protein fluid. This in turn is replaced as soon as oral feeding is well established and gastric suction discontinued.

Re-establishment of feeding should be undertaken very slowly and with great care. The saline solution used intravenously may be given in teaspoonful feeds half-hourly for two hours. If tolerated well then half strength breast milk is introduced for two one-hourly feeds. After this whole breast milk is given and increased slowly until, by the third day, the infant is having the full feed of breast milk three-hourly. As the infant’s condition improves a return to more normal nursing conditions may be achieved. The temperature of the cubicle is reduced slowly to 60° to 65° F. The patient’s temperature pulse and respirations are recorded four-hourly. The child may be lifted for feeding and soon be given to the mother to feed at the breast. The stools should be kept under observation, the infant weighed and a steady gain in weight established. As soon as the sutures are removed and the wound satisfactory the child may be discharged home, provided that the mother is herself fit and capable of looking after the infant under the supervision of her own physician and the district nurse.