CONSIDERATIONS IN THE CARE OF OUR PATIENTS BEFORE AND AFTER OPERATION.*

BY

H. WELLINGTON YATES, M. D., F. A. C. S.,

Detroit, Mich.

THERE is nothing new in dealing with this threadbare subject, but the author hopes to arouse some interest and perhaps some discussion upon a theme which still needs it.

First of all, I wish to make the patient and her interests paramount; and to that end let us deal with her as we would with a woman and a mother, rather than the case *in Ward No. 2, with uterine prolapse.* Let us have not so much of the routine, but more specific care for a specific case; let us adapt our resources and environment to her, instead of demanding her compliance alone to ours. Patients need more personal attention from the surgeon and less physic and digitalis from the hospital intern. Too much time has been given alone to questions of bare mortality and too little to morbidity, and to the causes of delayed restoration to the normal. We should not alone be interested in the cure of disease and saving of life, but likewise in the relief of pain and psychic influencs, consequents upon operation and hospital environment.

Every surgeon should be a humantarian. Surgery is a thing of art as well as science; a thing needing a fine esthetic sense rather than mere boldness. It is constructive, not destructive; it is saving life, not taking it, and likewise a surgeon is not he who has boldness, but one who has judgment; not alone he who knows how and when to operate, but also he who knows when to refrain and when to conserve. Crile's microphotographs of the brain cells taken before and after operation, before and after long anesthesia, pain, fear, excitement and exertion, certainly show that each one of the factors has a large part in the recovery of our patients, and should point the way, first of all, to the better preparation before operation.

Elective operations are those which are not strictly emergency operations; they are largely in the majority. We usually have the opportunity of choice, where, when and how the patient should be operated upon, and just here I should say too, that a considerable

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number of patients of the true neurasthenic class have been submitted to operation too frequently. Unless she has a definite demonstrable pathology, she should not be considered an operative risk. Many deaths that might have been avoided, have occurred in these patients of low resistance. Those affected by an early Graves' disease, where the thyroid enlargement is not yet apparent, and many children also, who have status lymphaticus, should be eliminated from operative consideration, unless forced upon us through some emergency.

Surgeons have paid too little attention to the internal secretions. Patients do not come to us for operations *per se*, they come to be cured of a malady of which they usually know nothing, and place themselves in our hands, because they have been referred to us by some other physician, who has failed to cure them. We should be exceedingly careful in the selection of such cases. As a rule, they are not given thorough examination—general physical examination, I mean. Every patient should have it. Some of our internist friends are as lazy as we and have not made thorough examination before referring the patient. I am well convinced that the majority of those diagnoses which are not made or are improperly made, are not because of lack of knowledge, but lack of time and proper application; therefore, we see a certain number of patients each year, sent to us for operation, who do not need it, or come at a time when they are poorly prepared for it. Then we have the other class which has definite pathology, which has or has not been diagnosticated before coming—the white-faced emaciated ones, who need rest in bed, rather than the wash-board and scrubbing that have been their wont. The patient needs good food, tonics, rest, etc., before an operation is contemplated. A short time in the hospital for general treatment, adaptability to the new environment, knowledge of the surgeon's personal care of her, and the assurance that she will make an early recovery, certainly have their good results.

PREOPERATIVE CARE.

In general, we have been giving all our patients more preoperative care than formerly, and less rushing to the hospital and hurried operation. For two or three days, we feed them well on easily digested nutritious foods; the last day we give 6 ounces of water each hour while awake; this fills the blood-vessels, increases kidney, liver and skin excretions and secretions. Nervousness and loss of sleep are exhausting, and should be met by such remedies as the usual sedatives

or opium. I think it imperative that the patient be given sufficient quantities of opium to induce sleep. A patient who is permitted to lie awake all night to meet perhaps one of the crises of her life the following day, is in poor condition to put up the necessary defense. We would not care for a team of plow horses that way, if we expected a full day's work from them on the morrow. We teach our nurses to be cheerful to our patients, and perhaps we also act in accord with them, but how little that interests the woman or man who has lain awake for two nights, thinking of operations or perhaps "the great divide."

As to clearing out the alimentary canal, we are heartily in accord with Doctor Baldwin. The patients should be given an active cathartic twenty-four hours or more before the operation. Castor oil is without question, we believe, best, since it sweeps out the entire bowel, producing a minimum of griping, and its action is complete before the night comes on, when we may need to administer opium for sleep. Unless the patient is to have a rectal operation, enemata of any description on the morning of the operation are contraindicated. What we want is intestinal rest. Enemata produce retroperistalsis, and it is often many hours after one is given before the last part of it is expelled. In our hands, this preoperative treatment has been indescribably better than the old days of compound cathartics and injections.

On opening the abdomen, the intestines are found empty and asleep, and I believe this is a decided prophylactic to later abdominal distention. We are convinced that our cases have been more comfortable in their early convalescence, and have yet to see the first case in which we regretted not having given an enema. One hour before the operation, a small dose of morphine and hyoscin is given subcutaneously; less mucus is secreted in the throat and trachea, and the patient takes less anesthetic. In general, we like gas and oxygen, combined with a little ether; it is less discomforting to the patient, followed by little or no nausea and vomiting; lessened thirst and immediate return to consciousness. It is an unusual thing to have the pulse affected by even long administration. At our hospital, we employ a skilled anesthetist, one who has prepared herself by many months' application in the technic of gas administration. Gas *is* dangerous in the hands of a novice, so is ether, so is chloroform.

All operative cases, especially abdominal ones, should have the benefit of laboratory findings. Our plan of attack has often been changed after we have reviewed these reports. Many operators think lightly of the reports from the laboratory; we feel that they

are one of our instruments of precision, and while we do not let them outweigh all else, still the laboratory has its definite place; it is indispensable, and when we become negligent in asking for all it can give us, we often find it to our disadvantage. This is particularly true in reference to blood findings.

OPERATIVE CARE.

The pendulum swings in surgery as in everything else. The thing we adopted yesterday we condemn to-day. So much for progress.

As regards abdominal surgery, we have learned that the viscera and their coverings speak in no uncertain manner, and to some extent we have learned their language, and, therefore, after an operation, some of them cry out by expressions of pain; some by way of abdominal distention; some by way of vomiting; some by thirst; some by pallid skin and sunken eyes; but the meaning of it all is, that we have given insult. One's insides were never intended to play ball in; but if, perchance, the ball has gotten in, our duty is to get it out as quickly as we can, with gentleness and safety. We have been taught by this language, that we must get in and get out; that we must make openings large enough to see that which we cannot feel; that we must do the least handling possible to accomplish results; that we should avoid forcible retractions, and when we seek to pick up bleeding points, pick them up separately, instead of insulting all the adjacent tissues; that warm moist gauze, used gently, is less offensive than dry gauze, used roughly. In brief, if one desires to tame a vicious animal, don't try to do it by way of teasing him. Permitting the intestines to be exposed to the air more than absolutely necessary, or to have them come in contact with the abdominal wall which has been prepared with iodine, to make traction upon the mesentery; to permit too many hands in the operating wound, all these and many more are certain factors in the production of that symptom-complex, we call shock.

During the last two years, since we have been giving more attention to preoperative care, and handling other peoples' intestines as we would like to have them handle ours when needs be, the factor of shock has been singularly absent. I heard Doctor Mayo once say, that anyone who would take advantage of their patients merely because they were asleep, and would pinch, pull and rub their exposed tissues needlessly, is a coward and a knave. I am convinced that surgeons are careless of nerve endings and splanchnic stimula-

tion, beyond what they would be were the patient conscious. Of all men who should be gentle and careful in the process of his work, it is the surgeon. It is well to know what shock is; to combat it when present, but how much better to be able to avoid it.

POSTOPERATIVE CARE.

The handling of patients should vary in accordance with their psychology and the nature and severity of the operation. In all operations of gravity, we use the Murphy drip, with bicarbonate of soda and glucose, as soon as the patient is returned to her bed. The soda will overcome the tendency to acidosis, the glucose furnishes an easily absorbable carbohydrate, and thus supplies energy. In those who through accident lose much blood or who sweat profusely, the giving of two pints or more of this solution, relieves the distress of extreme thirst, and overcomes tendency to shock. This is a harmless measure, giving little discomfort to the patient, and supplies her with water and food when her tissues have need of it. If the presence of a small rectal tube is annoying to a nervous patient, we then give 4 to 6 ounces of the same solution at one time, at intervals of three hours. We think this is a most valuable remedy, especially when administered early; thirst is not so severe, and the secretory organs, which are inhibited by long anesthesia, are made active. We desire to get liquids and food into our patients as soon as consistent with the circumstances. Thirst and nausea are disturbing factors, and when our patients call for water, we usually permit, in small quantities frequently repeated, hot tea or hot water, after the first two or three hours. If this is returned, then she is given as large a drink as she can be induced to take, and when this is returned, all liquids are prohibited by the mouth, until she is free from nausea. A stomach tube is seldom necessary, but occasionally becomes a valuable instrument in severe cases. Medication by the mouth has been found useless. Severe and long-continued nausea is sometimes relieved by a 3-grain opium suppository, repeated if necessary, until the stomach has been put at rest for a few hours. In our experience, it has acted better than morphine or codein for this purpose, especially so when the operation has been pelvic. I think some of these patients by the distressing experience of continued nausea and vomiting, become nervous and hysterical, and a dose of chloral and bromide per rectum is sometimes efficacious. Occasionally a patient dies from exhaustion.

No operation is entirely free from danger. We often advise operation, but only under special conditions do we urge it. We never have seen the persistent and sometimes serious vomiting, following gas and oxygen that is so common with ether or chloroform. Pain, when severe, should be controlled by codein, given subcutaneously. It does hot inhibit glandular activity. To be sure, the quantity should be curtailed as much as possible, but we think it is a wrong principle to allow patients to suffer with pain and fret for hours. Codein does not induce habit easily; it is more easily withdrawn than morphine, and in general produces less gastric distress, or bad dreams. I am a firm believer in large doses of anything that will control motion and sensation in the presence of a soiled peritoneum; motion is provocative of pain in any acute condition, and especially so in the bowel. Therefore, in peritonitis, we believe in the free use of opium to limit motion and maintain physical and mental rest. We prefer to have our patients bordering on unconsciousness for forty-eight hours by its use.

If we knew all the exact factors that cause abdominal distention, we might more easily combat it. Distention is often severe when there is no pathology in the abdomen, as a severe concomitant pneumonia, a stitch abscess, or operations following inguinal hernia. We occasionally have no meteorism following a severe abdominal or pelvic operation, which has been attended by much handling and considerable exposure, but such cases are rare. The writer feels that rough handling and long exposure of the viscera to air and foreign bodies, or pulling upon the mesentery, or the grasping of masses of tissue in the effort to get a single bleeding vessel, are likely to stimulate the splanchnics and induce paralytic ileus. The liberal use of sponges, and especially dry ones, is a pernicious practice in this respect.

The sole purpose of this paper is to focus thought on this point, not on the question of distention *per se*, but the factors which produce it.

I was surprised to read in the transactions of last year, that part of Doctor Reder's paper, in which he said, "Our later knowledge of preoperative care and general surgical technic, had not decreased postoperative abdominal distention." I wish to say, with all the emphasis at my command, that that part of his otherwise splendid contribution is wrong. As nature abhors a vacuum, so does she also the handling and exposure of those sacred precincts that were never intended even to be seen, and when we frustrate her plan she balks and her whole sympathetic system speaks to us in no uncertain words,

and one of these is distention. Therefore, the most important feature in treatment of this symptom is prophylaxis.

Gas pains following operations are by far the most distressing to the patient of anything she has to endure. A few die each year as a result of bowel inertia. If there be no contraindication, we endeavor to induce bowel movement on the second day by means of magnesium sulphate or castor oil given either by mouth or by rectum. The use of a rectal tube allowed to remain *in situ* for some time, is often beneficial. Medication by mouth is disappointing. After a day or two, when food can be retained, occasionally bread crusts and coarse stale bread with butter will often induce peristalsis. We have not found any single remedy to be of universal good. Pituitrin has more nearly reached that place than any other. Eserin, even in large doses, as recommended by Craig, has been disappointing in our hands.

The use of alum water, turpentine and asafetida per rectum are routine remedies. I have never used the Kemp's tube, as recommended by Dickinson. We often see the expression in medical periodicals, "the high rectal injection." If by that they mean that the rectal tube is passed through the rectum and sigmoid into the colon, then the expression is erroneous, for rectal tubes cannot be made to reach this area.

In closing, I wish to leave these thoughts:

1. Our patients are entitled to more preoperative and postoperative care than they have been receiving.

2. Patients suffer from shock by long anesthesias, exposures and rough handling of tissues.

3. Surgery is a thing of art and gentleness as well as knowledge and skill.

Gas Office Building.