SOME SURGICAL HINTS.

BY HERBERT J. PATERSON, C.B.E., M.C., M.D., F.R.C.S.

NEVER exclude the presence of a fracture or a dislocation unless you have had the patient X-rayed. Nowadays, most patients expect it, at any rate the judge and jury do so if, later on, an action is brought against you for malpraxis. If your

Fractures. patient does not consent to have an X-ray taken, write a letter to him strongly urging the necessity of it and keep a copy of the letter as a precautionary measure. Always control your treatment of a fracture by radiography. It is not an exaggeration to say that radiography, for the purpose of ensuring correct apposition, is of more importance than for purposes of diagnosis. If you find the bones are not in accurate position, try again. Sometimes you may have to make three or four attempts to put up a fracture before you succeed in obtaining perfect apposition. It is advisable always to give an anæsthetic when putting up a fracture, otherwise it may be very difficult and sometimes impossible to obtain a good result.

If good alignment cannot be secured after three or four attempts, the advisability of open operation must be considered. As a general rule, oblique or spiral fractures have to be plated. It is almost impossible to get a spiral or very oblique fracture into good position by ordinary manipulation, and if you succeed, it is very difficult to keep it so.

Never plate a compound fracture. The attempt almost always ends in disaster. Whatever the position, however bad it is, allow the wound to heal and see what happens. If necessary, you can operate at a later stage.

Make a point of keeping the splints on a fracture until union is firm, and remember that the periods of union are considerably longer than those usually given in textbooks. The argument advanced in favour of removing the splints early is, that otherwise there will be a stiff joint. Do not worry about stiff joints. A stiff joint is better than an ununited fracture. Personally, I think the fear of stiff joints is a bogie. I have never seen a permanently stiff joint from simple immobilization of a limb for fracture. If a joint does become somewhat stiff after prolonged rest, movement is soon recovered when the patient gets about, and with treatment by massage and passive movement.

Lastly, do not make rash promises as to the ultimate result.

Do not be in a hurry to operate without some preparation of the patient. I know of only two operations in which delay must be cut down to a minimum; they are perforation of a hollow viscus and tracheotomy. In other conditions it is, I think, wise to defer operation for six or eight hours, and in the meantime to give the patient sodium bicarbonate by the mouth, which minimizes the ill-effects of the anæsthetic, and to administer saline and glucose continuously by the rectum.

Emergency Operations.

Further, if you are wise you will not allow yourself to be persuaded, on the grounds of urgency, to operate in a private house. If the patient be fit for operation, he is fit for removal to hospital or to a nursing home. The delay, if any, will be more than compensated by the greater facilities available. In cases of badly-smashed limbs, resulting from railway or motor accidents, immediate operation is usually inadvisable. It is better to wait until the patient has recovered from the initial shock. Always remember the possibility of a fractured base of the skull. In such cases an anæsthetic may prove fatal.

Nowadays, most people recognize that acute appendicitis requires immediate operation, but here again, I am convinced that the patients do better if the operation is delayed eight or ten hours, in order that adequate preparation of the patient may be carried out. When this is done it is surprising how often the symptoms subside, so that operation can be delayed for four or six weeks—the so-called delayed treatment. This, however, should never be carried out except in a nursing home or hospital, so that immediate operation can be performed if urgent symptoms recur.

**Acute
Appendicitis.**

Do not decide in a hurry that operation is indicated in cases of internal hæmorrhage. Nature is a wonderful person, and often can deal with internal hæmorrhage very efficiently if you will help her, and if you trust her she will fail you but rarely. So far as hæmorrhage from gastric and duodenal ulcers is concerned, I do not believe it is ever wise to operate during the hæmorrhage. Beware of the fallacious argument which is sometimes advanced in regard to these cases, somewhat to this effect: "This patient is bleeding—he will probably die—something must be done." Even if we admit that these premises are true, and that the patient will probably die, is this any reason or justification whatever for doing something which will make him die sooner? Such an argument is illogical, as you cannot be certain that the patient will die, and in many cases of internal hæmorrhage operation may be the last straw for the patient, who, but for operation, might have recovered.

**Internal
Hæmorrhage.**

There is nothing more difficult to diagnose than acute intestinal obstruction in its early stage; nothing easier than in its later stages. Often the general practitioner is blamed most unjustly for not recognizing it earlier. When a patient is seized with acute abdominal pain and vomiting, you should always suspect intestinal obstruction. Above all, remember that a patient who can pass neither flatus nor fæces is a dying person. As regards operation for intestinal obstruction, the position is rather different from that in internal hæmorrhage. Acute obstruction, if left untreated, is inevitably fatal, therefore surgical intervention is justifiable even in the most desperate cases. It is right to take a big risk, even if it consists in merely opening the abdomen and draining the bowel, because relief of the obstruction is the only hope of saving the patient's life.

**Acute
Intestinal
Obstruction.**

Beware of operation on a patient with jaundice. Operation is hazardous on account of the difficulty in controlling the excessive oozing of blood. Jaundice due to gall-stones may clear up, temporarily at any rate; if the jaundice is deep and persistent, it may be due to malignant disease, in which case operation will do no good and may have a fatal issue. In cases of doubt the best policy is "Wait and see."

Gall-Stones.

Whenever possible, radical operations for malignant disease are best performed in two stages. The vitality of patients suffering from cancer is low, and they do not bear severe operations well. The two-stage operation greatly lowers the mortality rate.

**Malignant
Disease.**

In cancer of the stomach, a preliminary gastro-jejunostomy may be followed by a partial gastrectomy in four weeks. Usually, the patient improves in health and puts on weight after gastro-jejunostomy; if not, the probability is that there are secondary growths somewhere.

Never perform a radical operation for cancer of the bowel when there is obstruction. Drain the bowel by a cæcostomy, and resect the growth at a later stage.

Patients with a malignant stricture of the œsophagus die more often from lung complications than from starvation. The commonest cause of death is not starvation, but broncho-pneumonia. This being so, it may be argued that gastrostomy is not of much value. I believe that when a patient has difficulty in swallowing, he is made more comfortable and life is prolonged by a properly performed jejunostomy. I advise jejunostomy as an operation far preferable to gastrostomy in the treatment of carcinoma of the œsophagus. If any operation is to be done, it should be performed *early*, as soon as the diagnosis is certain. It is useless to wait until the patient is weakened and emaciated by inability to take sufficient nourishment.

**Carcinoma
of the
œsophagus.**

Do not be in a hurry to operate for the removal of a ureteral calculus, because it is probable that sooner or later the calculus, if it be a small one, will be passed. If you do decide to operate, be sure that the calculus has not been passed in the meantime. A skiagram should be taken as near as possible to the time fixed for operation, and all urine passed after the X-ray examination should be filtered through muslin, so as to be sure that the stone has not been passed subsequently. I have known a stone passed between the taking of a skiagram at 11.30 a.m. and 2 p.m., the time at which it was intended that operation should be performed.

**Ureteral
Calculus.**

THE USE OF CATHETERS.

BY J. SWIFT JOLY, F.R.C.S.

Senior Surgeon to St. Peter's Hospital for Stone.

PROBABLY the oldest catheter in existence is the bronze one which was found in the "House of the Surgeon" at Pompeii, and is now in the Museum at Naples. The details of the eye, and the general finish, show that the maker not only possessed great skill, but was accustomed to work of this nature. The instrument has a curious open curve, resembling that of the old-fashioned "long S." Incidentally a modern gum-elastic catheter, if tied in the urethra for a few days, will usually have a similar curve on withdrawal.

I merely mention this instrument to show that 2,000 years ago catheters were a recognized part of the surgeon's armamentarium.

Modern catheters are usually classified according to the material from which they are made, and we speak of them as metal, soft rubber or gum elastic. They are also classified by their curve, or the details of their beak or eye.

Metal catheters were formerly of silver, but are now made from brass tubing, and are nickel plated. They are easily sterilized by boiling, have a large lumen in comparison with their size, and last indefinitely. They have the disadvantage of being rigid, and are therefore more difficult to introduce than the flexible ones. In unskilled hands they may do serious damage to the urethral wall, and should never be recommended for self-catheterization.

**Metal
Catheters.**

In the older instruments, the eye was often a narrow slit in the lateral wall. It was shaped thus in order to prevent injury to the urethra during introduction. With a