CRITICAL REVIEW

A Survey of Gynaecological Surgery

BY

VICTOR BONNEY, M.S., M.D., F.R.C.S., F.R.A.C.S., F.R.C.O.G.

THE progress of gynaecological surgery for the last 40 years has been marked more by the modification of old operations than by the introduction of new ones. This is not to be wondered at seeing that our art was handed on to us by surgeons at least as ingenious and persistent as ourselves: "There were great men before Agammenon."

Of the really new operations I would place first McIndoe's grafting operation for the construction of a vagina. Its results are remarkable, the canal thus fashioned being, after a very short time, indistinguishable from the normal vagina. Best of all it carries practically no risk with it, and of the 46 operations which McIndoe has now performed in conjunction with various gynaecological surgeons every patient has recovered, and there was only one in which the desired end result was not accomplished. I have no doubt at all that it should replace all other methods of constructing a vagina. Of these Baldwin's operation is the best known but the transplantation of a segment of ileum entails a very definite risk to life. Such disasters do not get into the medical press, but I know of two, both women dying of intestinal obstruction at the site of the anastimosis. Such a happening is doubtless preventable but obviously there are other risks besides this one. I have performed the operation 7 times and am heartily glad that I shall never need to perform it again; for it is a most responsible procedure and one which puts a great strain on the surgeon. Moreover its risk limits its application to those cases where abolition of the deformity is urgently called for, whereas McIndoe's operation is so safe that it can be advised in any case, irrespective of whether the girl has marriage in prospect or not. What I have said about Baldwin's operation applies equally to the transplantation of a segment of the large bowel. Skin grafting operations to remedy the deformity in which the graft is whole-thickness skin are clumsy and tedious in performance, whereas McIndoe's operation can be carried out very quickly. It will, I think, always involve the co-operation of a plastic surgeon with a gynaecological surgeon since the latter has no opportunity of becoming expert in the cutting of a large superficial graft.

The second new operation I would mention is the suspension of the urethra by strips of abdominal fascia to rectify stress incontinence. This operation, which originally derived from the continent, has been well put to the proof by Chassar Moir (1945) in England and Aldridge (1944) in the United States, but in my opinion the best technique is that recently introduced by Terence Millin whereby the suspension is effected entirely through the abdomen, instead of the two-way approach previously employed. Excellent immediate results have been obtained

by all the surgeons named, but we must bear in mind that sufficient time has not yet elapsed to estimate the long-term results, for the tissues may stretch again. Even if such is proved not to occur I think that in the majority of cases of stress incontinence, the far lesser vaginal operation, which I originally devised 30 years ago, should be given a trial before resorting to the newer procedure which is of much greater magnitude.

It should be noted that neither of the two surgeons who have thus contributed to gynaecological surgery are themselves gynaecologists, and indeed all the great advances in this field stand to the credit of men who had other surgical interests besides gynaecology. Narrow specialism, though it achieves excellence in established procedures, seems to be unproductive of major progress.

The total hysterectomists continue to be vocal with, I think, harmful results, for while in expert hands the risk of removing the whole uterus is very little greater than removing the corpus only, in the hands of surgeons who only occasionally invade the pelvis is quite otherwise. I mind me of an unfortunate nullipara of 30, who, having a single fibroid, had her uterus and the base of her bladder removed together! All gynaecological surgeons of experience have come across such cases and genito-urinary surgeons are quite familiar with them. The threat of carcinoma in the retained cervix has always left me cold. In my series of 500 Wertheim operations there were 7 stump carcinomas and in 3 of them the growth was undoubtedly present when the subtotal hysterectomy was performed. It must be remembered, too, that cases of carcinoma of the cervix, as a class, have a much more stormy obstetrical and gynaecological history than the average woman, and amongst them the proportion of individuals who have undergone a previous operation is above the general average. The difference of opinion chiefly concerns hysterectomy for fibroids. Now a large proportion of these patients have never borne children and thereby have escaped the common determining cause of carcinoma of the cervix. An obviously unhealthy cervix, especially if split, should of course be removed with the corpus but for the rest the least operation which effects a cure should be chosen.

Wertheim's operation continues to be carried out by a number of gynaecological surgeons despite the confident prophecies of the all-out advocates of irradiation, and it is interesting to note that in the United States, where for years the operation had been very little practised, there is a swing in favour of surgical measures. This is as it should be, for some cases of carcinoma of the cervix are better treated by surgery than by irradiation, and it would be an irreparable loss to gynaecology if the skill necessary to do the operation was permitted to die out.

Myomectomy has an increasing vogue amongst the elect but hysterectomy is still constantly being performed by the less skilled in cases where the conservative operation would be just as feasible and safe, or even safer. This is a matter for education in which the leaders of our calling must be the exemplars and teachers. The scope of the operation has been enormously enlarged, chiefly because means have been found to obstruct the blood flow to the uterus during the operation, and it can be claimed that, as far as the technical difficulties dependent on the number, size and position of the fibroids are concerned, the operation can be carried out on at least 95 per cent of the cases. This is a great advance, for the surgeon now has a free hand to decide whether conservative or radical measures best accord with the patients' interests, instead of being pressed

or driven to hysterectomy by fear of the difficulties and risks attaching to myomectomy.

Conservative surgery has been further enlarged by the operation of ovarian cystectomy, whereby ovarian cysts are shelled out and the whole of the ovarian substance conserved. The operation is applicable to all obviously innocent cysts and is specially beneficent to those cases where, in a young woman, both ovaries present multiple cysts—follicular, chocolate, or dermoid. Stanley Way (1946) has pointed out that in the case of ovarian cysts, recently and not severely twisted, if the surgeon, having untwisted the pedicle, will wait a little while, circulation re-establishes itself and ovarian cystectomy can safely be carried out instead of ovariotomy.

The operation appears to be a singularly safe one, there being no deaths in a series of over 300 operations recently reported. The importance of conserving all sound ovarian tissue is being increasingly recognized but the needless removal of ovaries is by no means extinct as yet.

Turning to the surgery of the Fallopian tubes, the reduction in the incidence of gonorrhoea and still more the improved methods of treating it, have greatly reduced the number of these cases, so common 40 years ago, where a double pyosalpinx with ovarian abscesses, and extensive adhesions made the necessary operation a very severe and difficult one. In my younger days two or three of such cases could be found in any gynaecological ward on any day of the year.

The conservative surgery of the Fallopian tubes (salpingostomy, tubal re-implantation) logically followed the introduction of tubal insufflation, and various operators have published their results. These are frankly disappointing, only 15 to 18 per cent of the patients wishing to have a child having become pregnant afterwards; and some surgeons have become disheartened and hesitate to advise an attempt to reopen closed Fallopian tubes. I deprecate this defeatist attitude. That success can be obtained is clear, and if, as I believe, imperfect technique is the cause of its rarity, our course surely is to improve upon it and not abandon the operation altogether. It has been stated that operatively reopened Fallopian tubes almost invariably become closed again within a year, but I know of many cases which contradict this pessimistic view.

For retroversion, shortening of the round ligaments by one or other of the many methods holds the field and the older ventral fixation is not often performed nowadays. The disrepute into which it has fallen derives from a distinguished gynaecological surgeon, who took to fixing the posterior wall of the uterus and when disasters in pregnancy began to accumulate denounced the whole operation, however performed! His voice was so authoritative that textbook after textbook down to the present day has repeated the condemnation. As a fact, fixation of the anterior wall has absolutely no effect on pregnancy or labour, and there are times when it should be chosen instead of round ligament shortening.

Long experience has taught me that there is one definite disadvantage to ventral-fixation, it is this: the posterior pelvis is abnormally opened up, with the result that a larger proportion of intestine occupies it. This increases the intra-abdominal pressure in Douglas's pouch, and if the posterior vaginal vault is already weak a prolapse in that situation (hernia of Douglas's pouch) is liable to develop. I have knowledge of 4 such cases in the last 10 years.

The reparative operations for prolapse have become pretty well standardized and

are so successful that pessaries are now only rarely advised. The vogue for removing the uterus as part of the operation is fashionable on the other side of the Atlantic and has some followers in this country: I hold it an entirely unnecessary thing to do (unless, of course, the uterus needs removing for a cause additional to the prolapse) and a relic of the old false view embodied in the lay expression "falling of the womb." Prolapse is the result of the vagina partially or completely turning inside out, and as such it is a purely vaginal phenomenon. The uterus by its bulk obstructs the movement, which is why complete prolapse is scarcely ever seen except in women past the change of life. or in those on whom total hysterectomy has been performed. The most difficult cases of complete prolapse to cure by operation are those where the patient has previously had her entire uterus removed. What I have said does not imply that the operations which include hysterectomy fail to cure the prolapse: they do; but the same result can be achieved without this needless enlargement of the operation.

As regards those disappointing cases where, after a reparative operation has been performed, the patient some years later returns again complaining that "something falls"; I would point out that in a number of these instances the return to the surgeon is occasioned, not by the work he did having given way, but by the development of a prolapse in a new situation. Thus after posterior colporrhaphy a posterior vault prolapse or a cystocele may appear, or, after anterior colporrhaphy, prolapse of the anterior vaginal vault.

The marked improvement in the results of gynaecological surgery which has been brought about in the last 40 years is due not only to advances in the technical details of the operations and the introduction of new procedures, but equally to the great increase in the adjuncts to surgery which the surgeon of today now enjoys. Chief amongst these is the perfection to which blood-transfusion has attained. In my younger days the most severe operations (Wertheim's for instance) had to be performed without this powerful aid. Saline infusion was employed, but only when the patient was *in extremis*. In connexion with infusion I would call attention to the excellent work of Avory and Naunton Morgan who showed that ordinary saline solution puts a great deal too much salt into the patient.

Spinal and intravenous anaesthesia have contributed to the improvement in no small degree, while better theatre technique and more efficient methods of antisepsis have played a great part too. From 90 per cent of women *S. Aureus*, often haemolytic, can be recovered from the abdominal skin; a fact which should give all abdominal surgeons cause to think furiously.

The attention now being given to the prevention of air infection has great historical interest, for it revives the original Listerian teaching. Lister endeavoured to counter it by the carbolic spray and failed, whereupon a school of thought arose which maintained that the danger was non-existent; a perfect example of Huxley's dictum: that many a truth has been turned down because of the faulty argument with which it was propounded. The splendid work of Leonard Colebrook (1944, 1946) should be studied by all surgeons. He makes it perfectly clear that patients should come into the theatre covered only by a paraffined blanket, the clothing having been taken off outside; and that in the future every operating theatre should be air-conditioned and fitted with an air-filtering device.

The steady advance of our art, which I have tried to outline in this cursory review,

shows at least that there is no finality in surgery. In climbing the tree of knowledge we stand upon our predecessors' shoulders and pluck fruit which they could not reach and our successors will stand on our shoulders and reach further still. The thought is humbling, but salutory, for it forbids any of us to cease climbing when so much is ahead.

REFERENCES.

Aldridge, A. H. (1942): *Amer. J. Obstet. Gynec.*, **44**, 398.

Avory and Naunton Morgan (1939): *Lancet*, Sept. 9th, p. 611.

Colebrook, L. (1944): *Spec. Rep. med. Res. Coun.*, No. 249.

Colebrook, L. (1946): *J. Obstet. Gynaec.*, **35**, 114.

Moir, J. C. (1945): *Proc. R. Soc. Med.*, **38**, 662.

Way, S. (1946): *Lancet*, **2**, 47.