# Sequelae of Gynaecological Operations

BY

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*Que Que*

1. A small series (thirteen cases) are reported in which particular late complications of gynaecological operations directly attributable to the operative procedures, caused disability necessitating surgical correction. The complications relate firstly to adhesions involving bowel and secondly arising from an ovary or ovaries not removed.

2. MATERIAL PRESENTED

Adhesions involving bowel caused varying degrees of interference with bowel movement from constipation and distention associated with abdominal pain usually with cyclic exacerbations to subacute or acute obstruction. In four cases this syndrome was the sole problem. In four others it was associated with the second (ovarian) syndrome described below. Adhesions involved the pelvic colon in all cases, in one instance the transverse colon and in three cases small bowel. The adhesion of the bowel was to the adnexae or uterus where operative procedures had involved these or to pelvic floor where a hysterectomy had been done. In two cases small bowel and omentum were adherent to the laparotomy scar as well.

The ovarian complications were: ovarian abdominal pain, backache and dyspareunia (usually with periodic exacerbations). It occurred as the sole problem in five cases and in four cases associated with intestinal complications.

The relevant details of these cases are recorded in the attached Table.

The original causative operations are assessed as follows:

Abdominal hysterectomy ...... ...... 7 cases
Vaginal hysterectomy ...... ...... 1 case
Caesarean section ...... ...... ...... 1 case
Adnexal procedures ...... ...... ...... 4 cases
(wedge resection of ovaries, 1 case; ventrosuspension and salpingectomy, 1 case; oophorectomy, 2 cases.).

The number of previous gynaecological operations (apart from dilation and curettage) per case were:

One operation ...... ...... ...... ...... 6 cases
Two operations ...... ...... ...... ...... 7 cases

In addition to these thirteen patients, during the same period an additional five cases on whom reoperation was required for other than the above reasons, postoperative adhesions in the pelvis were found to be extensive but symptoms referable to them were uncertain or overshadowed by other symptoms and pathology—menorrhagia, metrorrhagia, dysmenorrhoea, and pain not typically ovarian.

During the same period also eight cases of repeat gynaecological laparotomy revealed no or little adhesions.

3. Comment

(A) *Intestinal Adhesions*

Detailed reports of late intestinal obstructive complications of gynaecological operations appear to be few. That this problem should particularly relate to gynaecological surgery as distinct from general abdominal laparotomy receives scant attention.

Wist (1962) could find no detailed reports in the literature and his comprehensive review is one of the few I have managed to find. Harrel (1964) in passing (describing the technique for excision of cervical stumps by the abdominal route) comments that it is not unusual to find many adhesions in the pelvic separation of bowel from the pelvic floor before proceeding with the stump exposure. Ulfelder (1962) mentions the danger of gynaecological laparotomies in this respect and emphasises the need of prohylaxis in technique. Melody (1961) reports on the high incidence of late intestinal obstruction following total and subtotal hysterectomies.

Wist remarks that "gynaecologists may readily acquire a misleading optimistic view of the risk of intestinal obstruction from gynaecological laparotomies as those seen by them are restricted to those (few) which occur in the early postoperative period." The general surgeons see and deal with the great majority.

In the cases reported in this account the gynaecologists who performed the original operations would remain unaware of the late complications reported. Gynaecologists I have spoken to on the subject usually express surprise that this should be considered a gynaecological problem and that there is a significant incidence. Wist reports an incidence of 42% of all intestinal obstructions (586 cases) in females in Helsinki during the period 1949-58 as being a late complication of gynaecological laparotomy while the total postoperative (including general abdominal surgery) was 64.8%. He concluded that "gynaecological laparotomy is the most important of the causes that may give rise to intestinal obstruction in the female and appears to be more common after gynaecological than other surgical laparotomies." In the period during which the cases reported in this account were seen, no cases of late intestinal obstructive complications were seen related to general abdominal surgery.

Whether the adhesions were linear, band-like or over a wider area, the impression gained was that peritonisation at the site after original operative procedure was defective or imperfect to some degree. There was no evidence or indication that irritants or infection played a part in these cases except in Case 12. Blood in the peritoneal cavity could only have been a major cause in the case of the caesarian section. Reperitonisation of the abdominal wall or pelvic floor and separations of adherent bowel where necessary appears to have substantially corrected the problem in all cases except in case 12 in which repeated relieving operations for intestinal obstruction culminated in resection of much of the adherent small bowel before the problem was overcome.

(B) *The Ovarian Syndrome*

The ovarian syndrome in all cases appeared to be related to the extraperitoneal embedding of the ovary with or without tethering of it to the vaginal vault or cervical stump or caught up in pelvic adhesions in case (4).

Some ovarian enlargement (evident in all cases) in this abnormal anatomical "bedding" may have been a factor in the symptomatology and may explain the cyclic exacerbations. Vaginal examination elicited abnormal ovarian tenderness and reproduced the pain experienced in dyspareunia. The offending ovary was removed in six cases and freed but not removed in three cases. In all cases except case (4) the syndrome was relieved without recurrence reported to date.

TABLE OF CASES

| Name | Original Operation | Ovarian Syndrome | Intestinal Syndrome | Operative Findings & Corrections | Time after last operation | Result |
|---|---|---|---|---|---|---|
| 1. Mrs. M. P. | Abdominal total hysterectomy (G) May, 1964. | + | — | Feb., 1965. Large rt. ovary fixed to vaginal vault and extra-peritoneal-ovary removed. | 9 months | Symptom free to date. |
| 2. Mrs. S. A. V. | 1961. Vaginal hysterectomy. (G.P.) | + | — | June, 1962. Ditto (left ovary involved). | 1 year | Ditto. |
| 3. Mrs. J. L. | Ovarian cystectomy followed by abd. total hysterectomy (G.P.) 1957 | + | — | May, 1962. Ditto (rt. ovary involved). | 5 years | Ditto. |
| 4. Mrs. H. | Ovarian cystectomy followed by wedge resection ovaries 2 years later. (Bilateral) 1962. (G). | + | — | March, 1965. Lt. ovary & tube embedded in adhesions between pelvic colon and broad ligament. Reperitonealised. Rt. ovary fixed to side of pelvis—freed. | 3 years | Reduced ovarian pain to 2-3 days premenstrually. |
| 5. Mrs. M. M. W. | Ovarian cystectomy followed by sub-total hysterectomy 2 years later. (G.P.) Feb., 1964. | + | — | August, 1965. Stump removed with large crystic ovary adherent to it*. | 1½ years | Symptom free to date. |
| 6. Mrs. v. G. | 1. Ovarian cystectomy (rt.) Oct. 1962. (G.).<br>2. Lt. ovarectomy Oct., 1963. (G.P.). | + | + | July, 1964. Rt. crystic ovary buried in adhesions between pelvic colon and broad lig. Ovary removed. Adhesions separated—reperitonisation as required. Total hysterectomy. | 9 months | Ditto. |
| 7. Mrs. C. H. | "Tubes tied" 1948 (G.P.). Total hysterectomy and rt. ovarectomy 1953. (G.P.). | + | ++ | Dec., 1964. Small bowel adherent in pelvis & pelvic colon fixed to pelvic floor with buried crystic ovary. Ovary removed. Adhesions separated & reperitonisation as required. | 11 years | Minor L.I. Fossa pain occasionally. |
| 8. Mrs. M. E. F. | Aug., 1963. Ventrosuspension & rt. ovarectomy (G.). | + | ++ | March, 1965. Pelvic colon adherent to adnexa—separated & reperitonisation. Subtotal hysterectomy. Lt. ovary cystic and buried in pelvic adhesions—removed. | 1½ years | Occasional Lt. I.F. discomfort. |
| 9. Mrs. van R. | 1954. Total hysterectomy (ovaries retained) (G). | + | ++ | April, 1965. Lt. ovary cystic, enlarged & embedded in pelvic floor retroperit-aneally—removed. Pelvic floor reperiton-ised. Rt. ovary adherent & fixed. Separa-ted. Adhesions, small bowel to ant. abd. wall—separated. | 11 years | Not seen since discharged from hospital. |
| 10. Mrs. K. A. C. | Caesarean Section. Feb. 1961 & 1962. (G.). | + | ++ | Aug. 1963. Adhesions small bowel to uterine scar—separated. Hysterectomy. | 1 year | Occasional back-aches only. |
| 11. Mrs. J. P. | Total abdominal hysterectomy. March, 1962 (G.). | — | ++ | April, 1963. Sigmoid & small bowel fixed to pelvic floor (vaginal vault) separation of bowel from floor. Reperitonisation as required. Pelvic colon fixed high up. | 13 months | Much improved but constipation per-sists without ob-structive signs. |
| 12. Mrs. J. H. V. | Earlier history of 2 operations to adnexa. (G.P.). Abd. hyst. March, 1957 (G.). Two relieving ops. for acute intestinal obstruct. (G.P.). | — | +++ | June, 1965. Lower half of small bowel fixed in one mass & fixed to pelvis and adherent to abd. wall. *Resection of 5 feet of bowel & Noble plication of lower half of small bowel performed. | 8 years (after first operation) | Symptom free to date. |
| 13. Mrs. S. E. B. | Total hysterectomy March, 1962 (G.). | — | ++ | Feb., 1964. Small bowel adherent to pelvic floor separated—reperitonisation as required. | 2 years | Symptom free to date. |

(G) Gynaecologist.
(G.P.) General Practitioner
* Operation performed elsewhere (Nos. 5 and 12).

Intestinal Syndrome:
+ Constipation and abdominal pain.
++ Subacute obstruction.
+++ Acute obstruction.

Ovarian syndrome:
Ovarian abdominal pain, dyspareunia backache. Cyclic aggravation.
Present + Absent —.

I could find no reference to this problem in a survey of the index of gynaecological articles and review of those dealing with late complications, published since 1959.

### CONCLUSIONS

(a) *Adhesions*

The number of cases presented is small but seen over a period of three years in a general practice, prompts one to believe that adhesions causing disability from gynaecological procedures must be common enough to warrant stressing the factors producing the syndrome and the requirements in operative technique to alleviate it.

Wist and Ulfelder concluded that the cause of the adhesions in post hysterectomy, myomectomy and adnexal procedures was inadequate peritonisation of the operative area within the peritoneal cavity and in closure of the laparotomy wound. They therefore stress the need for meticulous reperitonisation of raw areas of the pelvis, on the uterus or of adnexa or pedicles where tissue is removed. The experience of the cases presented confirm this need and indicate that technique in this respect in a number of cases falls short of what is required whatever the reason for the deficiency may be—difficulty in specific cases or inadequacy of technique.

No opinion could be drawn here as to the importance of residual blood in the abdominal cavity and whether abdominal saline washout or saline retention in the abdomen would significantly affect the issue in cases which intraperitoneal blood is incidental to operating only.

(b) *Retention of Ovaries*

The inference drawn from disability reported in respect of retained ovaries is that these should not be buried, that peritoneal covering should be confined to the adnexal stump only and that fixation of the stump to the vaginal vault or cervix stump after hysterectomy should be restricted to the uterine end of the round ligament. The ovary itself should be mobile in the pelvis. This suggestion is put forward for consideration as the number of cases are too few to draw firm conclusions, particularly in the absence of any other reported evidence of the problem.

### SUMMARY

Attention is drawn to two late complications attributed to gynaecological abdominal surgery.

### REFERENCES

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