# OPERATIVE GYNAECOLOGY IN GERIATRICS

by

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Geriatrics is a very fascinating branch of medicine, with its own facets like in paediatrics, and forms an important group of patients in gynaecology. Their gynaecological problems are quite different from those in the younger population. Medical conditions especially cardiovascular, pulmonary and renal problems are more commonly associated in these women with complicate gynaecological surgery. Hence gynaecologist will have to be extra careful and cautious to avoid errors of diagnosis and prevent complications in management.

*Material and Methods*

This paper deals with 165 women above the age of 60 years who underwent gynaecological operations at K.E.M. Hospital and Seth G.S. Medical College in a span of 9 years from January 1964 to January 1973. Clinical evaluation, pre-operative status, type of operation, post-operative stay and complications are presented and discussed. For comparative study, 200 cases each were analysed in 41 to 59 and 21 to 40 years age groups. Gynaecological problems, associated abnormalities, types of operations and complications are compared with the younger age groups.

*Selection of Patients*

They were selected on basis of age i.e. more than 60 years. Table I shows the agewise distribution of these patients.

TABLE I
*Duration of Menopause*

| *Duration of Menopause in Years* | No. of patients |
|---|---|
| 1-10 | 15 |
| 11-20 | 98 |
| 21-30 | 47 |
| More than 30 | 5 |
| TOTAL: | 165 |

Majority (106) of them were in the age group of 60-65 years, (54) in the 66-75 years age group and only (5) were more than 76 years of age, the oldest patient being 81 years. The possible reason for less number of patients in the later age group appears to be dependent of longevity. Women below the age of 60 years

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are not considered in the geriatric group though exact age demarcating geriatrics is still undefined.

All women presently studied were post-manopausal with varying duration of menopause. No one with menopause less than 15 years was included unless they were more than 60 years age. One hundred and forty-five of the total 165 patients had menopause of 11 to 30 years duration as seen in Table I. Menopause does play a significant role in producing certain gynaecological problems. It may directly contribute or predispose to complication and add burden to surgery. It would be more appropriate to establish a definition of geriatrics based on ovarian function and duration of menopauses rather than rely on mere figure of age. Nine women were nullipara, 116 were from 1 to 6 parity group while 40 were of seventh or higher parity.

*Clinical Findings*

Genital prolapse, post-menopausal bleeding with pelvic tumours account for 92% of gynaecological conditions in the geriatric group. Thirty-one out of 165 were operated for malignancy, an incidence of 18.7%. This compares with an incidence of 21.6% of malignancy in a study of geriatric patients by Shands and McKuthen (1975).

Table II shows the comparative incidence of gynaecological problems in younger age-group i.e. 41-59 and 21-40 years. The incidence of genital prolapse was slightly more in the geriatric group, while dysfunctional uterine bleeding was commoner in the younger groups.

The geriatric group had 20.6% incidence of malignancy of the genital tract, while this was so in only 2% of 21-40 years age group. Incidence of pelvic tumours was almost the same in the geriatric and 21-40 years age groups but much less in 41-59 years age group.

*Genital Prolapse*

Ninety-three patients came with genital prolapse. Six patients had associated post-menopausal bleeding, while one each had associated perineal tear, rectal prolapse, vesical calculus and stress incontinence. None of them had malignancy. Ten had second degree uterine prolapse, while 62 had third degree prolapse and 21 had procedentia.

*Post Menopausal Bleeding*

Thirty-two cases presenting with post-menopausal bleeding were investigated

TABLE II
*Incidence*

| Diagnosis | Patients in Age Group | | |
|---|---|---|---|
| | 60-80 years | 41-59 years | 21-40 years |
| I. Genital prolapse | 56.2% (93) | 51.2% | 50% |
| II. Peri or postmenopausal bleeding: | | | |
| (a) Carcinoma cervix | 9.8% (16) | 6% | 2% |
| (b) Carcinoma body | 3.6% (6) | 0.4% | — |
| (c) Genital Koch's | 0.7% (1) | — | — |
| (d) No pathology | 5.5% (9) | — | — |
| III. Dysfunctional uterine bleeding | (5.5%) | 32% | 25.2% |
| IV. Pelvic tumours | 16.8% (27) | 4% | 14.6% |
| V. Miscellaneous | 7.8% (13) | 6.4% | 8.2% |

in detail to arrive at the exact diagnosis. The diagnostic procedures used were cytological examination, examination under anaesthesia, curettage and biopsy. Five of them showed no pathological lesions. From Table we find that 71.8% of post-menopausal bleeding was due to malignancy in post-menopausal bleeders was strikingly high as compared with that mentioned by Jeffcoate (1967) who states a 30 to 50% incidence of malignancy for continuous bleeders after menopause.

Wittlinger and Dollenbach (1976) studied 385 patients with post-menopausal bleeding and found an incidence of invasive carcinoma in 41.2% pre-cancerous alterations in 9.1% of them. They further mention that in 50% of patients in late menopause, bleeding was due to malignancy as compared to only a third of the patients in early menopause. As negligence and ignorance are so prevalent in hospital class of women in our country only persistent bleeders are more likely to have come to the hospital and hence the strikingly high percentage of malignancy.

*Pelvic Tumours*

Of the 27 patients who presented with pelvic tumours, 13 had benign ovarian tumours, 9 (33.3%) had malignant ovarian tumours and 5 of them had uterine fibroids, while almost all the tumours in the 21 to 40 years group were of a benign nature.

*Preoperative Management*

All patients were given a complete preoperative work up including X-ray and ECG. Blood pressure was recorded on multiple occasions. After this, a medical consultation was obtained for surgical fitness.

One hundred and thirty-eight patients had anaemia of varying grades. Those who had haemoglobin of less than 10 gms% were not taken up for surgery unless they were bleeding profusely and it was not possible to build up their haemoglobin. Diabetes, hypertension, abnormal cardiograms and chest skiagrams were certainly commoner than in the younger age group. This would emphasize the need for these investigations and stabilization before surgery is undertaken. Adequate control of these factors will help to prevent complications which are common at that age.

*Anaesthesia*

Choice of anaesthesia was mainly left to the anaesthesiologist. All had spinal or general anaesthesia except 11 patients. Eight patients were operated under local anaesthesia as they were medically unfit and 1 had epidural anaesthesia. The operations done under local anaesthesia included vaginal hysterectomy, Le Fort's operation and radium insertion. Proper choice of anaesthesia is very essential so as to avoid myocardial infarct, cardiac arrest and various other complications. Authors feel that local anaesthesia would be ideal for many patients where general or spinal anaesthesia is contraindicated.

*Operative Gynaecology*

Of 165 patients, 36 had abdominal operations, while 129 had vaginal operations. Of these, 86 patients had vaginal hysterectomy with or without repair, 19 had abdominal hysterectomy, 9 had redical hysterectomy and 11 had a Le Fort's operation. Table III shows a comparative incidence of gynaecological operations in different age groups.

*Complications*

Table IV shows that post-operative

TABLE III
*Type of Operation*

| *Type of Operation* | Patients in Age Group 60-80 years | 41-59 years | 21-40 years |
|---|---|---|---|
| *Abdominal Operation* | | | |
| Radical hysterectomy | 5.4% (9) | 5.0% | 2.0% |
| Abdominal Hysterectomy | 11.8% (19) | 22.8% | 10.0% |
| Ovarian Cystectomy | 2.4% (4) | 1.4% | 8.8% |
| Cervicopexy | — | — | 6.8% |
| Myomectomy | — | — | 4.8% |
| Tuboplasty | — | — | 1.6% |
| Miscellaneous | 2.4% (4) | 0.4% | 3.6% |
| *Vaginal Operations* | | | |
| Mayowards Hysterectomy | 44.8% (74) | 34.4% | 16.0% |
| Vaginal Hysterectomy | 7.2% (12) | 35.2% | 21.6% |
| Le Forte's | 6.6% (11) | — | — |
| Fothergill's Repair | — | — | 20.8% |
| Schauta's Vaginal Hysterectomy | 1.2% (2) | 0.4% | — |
| Vaginoplasty | — | — | 0.8% |
| Miscellaneous | 18.0% (30) | 0.4% | 3.2% |

complications occurred in 71.1% patients as compared with 42.4% in the 41 to 59 age group and 33.4% in the 21-40 age group. This is because of low general health associated medical conditions and higher incidence of cancer surgery.

Incidence of urinary tract infection and inability to void urine completely, were significantly higher in this age group probably because of poor muscle tone. They are compared with younger age group (Table IV). Two patients had burst ab-

TABLE IV
*Complications*

| *Complications* | Patients in Age Groups 60-80 years | 41-59 years | 21-40 years |
|---|---|---|---|
| Headache | 15.1% (25) | 13.2% | 14.4% |
| Pyrexia | 12.1% (20) | 10.4% | 8.4% |
| Urinary tract infection | 20.0% (33) | 8.4% | 5.2% |
| Excessive residual urine | 18.1% (30) | 7.2% | 4.2% |
| Burst abdomen | 1.1% (2) | 0.4% | — |
| Gaping wound | 3.6% (6) | 0.8% | 0.8% |
| Vaginal infection | 1.1% (2) | 1.2% | 0.4% |
| Secondary haemorrhage | — | 0.4% | — |
| Post-operative collapse | — | 0.4% | — |
| TOTAL: | 71.1% (118) | 42.4% | 33.4% |

domen which required resuturing. The incidence of gaping wounds was four times more than in the younger age group. Pyrexia, headache and other minor complications were not significantly altered. There was not a single post-operative death in this series. Shands and McKelthen (1975) reported 2 deaths among 185 operated geriatric patients—a mortality rate of 1%.

*Hospital Stay*

Despite higher incidence of associated medical conditions and complications, hospital stay in most of the patients was not unduly prolonged. Ninety-nine patients had post-operative stay of 10 days or less (Table V) and a majority of those who stayed more than 10 days had either an operation for cancer or urinary stasis.

TABLE V
*Post Operative Stay*

| Post-operative stay in days | No. of patients |
|---|---|
| 1- 5 | 13 |
| 6-10 | 86 |
| 11-15 | 29 |
| 16-20 | 16 |
| 21-30 | 12 |
| More than 30 | 9 |
| TOTAL: | 165 |

*Discussion*

A study of the present series shows that gynaecological surgery in geriatric patients was mainly for genital prolapse, ovarian tumours and post-menopausal bleeding. Those with post-menopausal bleeding need thorough systemic evaluation and investigations to arrive at a correct pathological diagnosis as incidence of malignancy was 71.8%.

Incidence of associated medical disorders was higher than in younger age groups and hence need for rigid evaluation. Even those patients who do not have any associated complications are likely to pose a problem at the time of operation or later because of poor nourishment and tissue integrity. With a good pre-operative evaluation, a proper selection of patients, control of associated complications adequate transfusion facilities and good post-operative care, one can achieve quick and better convalescence, low morbidity and negligible mortality as is apparent from this study.

Selection of anaesthesia is an important aspect of geriatric patients. In this series spinal anaesthesia was more frequently used than general anaesthesia, though latter was more frequent than in the younger age group. Of late anaesthesiologists tend to prefer general anaesthesia in geriatric patients as it is safer for the patient, more comfortable for the gynaecologist and the anaesthesiologist. Local anaesthesia was used in only 8 patients, though with adequate premedication and proper use of local anaesthesia, major operations like vaginal hysterectomy with repair can also be done.

*Summary*

Operative gynaecology is analysed in geriatric age group patients. These were totally 165 women who underwent gynaecological surgery for various indications and pathology. Genital prolapse, malignancy and ovarian tumours were the commonest problems indicating different surgical procedures. Incidence of malignancy in post-menopausal bleeders was 71.8%. There was a significantly higher association of medical disorders, thus emphasizing the need for clinical and laboratory evaluation of these women before taking them up for surgery. Major

complications were encountered infrequently, and there was no post-operative death. Type of pelvic pathology, operations and complications are discussed and compared with those in the younger age group. It is concluded that geriatric patients in a well equipped modern institution can tolerate gynaecological surgery very well.

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