

# ENDOMETRIAL CARCINOMA: A REVIEW OF 37 CASES IN SINGAPORE

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## SYNOPSIS

37 cases of Endometrial Carcinoma seen over a six years period in the University Unit, Kandang Kerbau Hospital, are reviewed. Treatment was carried out in 29 patients. Of the remaining eight cases, four defaulted after preoperative radiotherapy, three refused any form of treatment and one presented in an advanced stage of the disease with widespread metastasis in the lungs and right ischium. 46% of the patients in this series were between 55-64 years. 53% of patients had their menopause at the age of 50 years and above. Nulliparae accounted for 37% of patients in this study. Diabetes and hypertension were found respectively in 5% and 29% of our patients. The commonest presenting feature is post-menopausal bleeding, occurring in 81% of cases. A significant number of patients sought medical treatment late despite the presence of symptoms. At the time of this report 21 cases out of 29 treated cases were alive (73%). Only 7 patients have passed the five-year survival period.

In recent years, the incidence of endometrial carcinoma in Caucasian women is reported to be gradually but steadily rising. This is partly due to an increasing number of women in the older age group (Kottmeier, 1959). Contrary to the experience in the West, endometrial carcinoma is relatively uncommon in Singapore. The following study was undertaken to review our experience in managing this condition over a 6-year period (1965-1971).

### MATERIAL AND METHOD

From January 1, 1965 to October 31, 1971, 37 patients with endometrial carcinoma were seen at the University Department of Obstetrics and Gynaecology, Kandang Kerbau Hospital for Women, Singapore. Twenty nine patients have been followed up regularly in our Cancer Follow-up Clinic up to the time of this report.

### RESULTS

#### Ethnic Groups

Out of the 37 cases, 32 were Chinese, 4 were Malays and 1 Indian. The numbers were too small for statistical evaluation of racial incidence.

#### Age

The age distribution of the patients is shown in Table I. The age range was from 42 to 79 years

with a mean of 58.3 years. The most common age group was 55-64 years, accounting for 46% of cases.

TABLE I

| Age          | No. of Cases |
|--------------|--------------|
| 45           | 1            |
| 45 - 54      | 11           |
| 55 - 64      | 17           |
| 65 - 74      | 6            |
| 75 and above | 2            |
| TOTAL        | 37           |

#### Parity

The incidence of parity is shown in Table II. Nulliparous patients had the highest incidence, accounting for 37% of the cases.

TABLE II

| Parity      | No. of Cases |
|-------------|--------------|
| 0           | 14           |
| 1           | 7            |
| 2           | 5            |
| 3           | 3            |
| 4           | 1            |
| 5           | 2            |
| 6           | 1            |
| 7           | 2            |
| 8 and above | 2            |
| TOTAL       | 37           |

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### Associated Conditions

Two patients (5%) had Diabetic glucose tolerance curve. 11 patients (29%) were found to have a diastolic blood pressure of 100 mm. Hg. and above. In eight patients (21%), fibromyoma was found together with endometrial carcinoma.

### Presenting Symptoms

These are shown in Table III.

TABLE III

|                         |    |
|-------------------------|----|
| Postmenopausal bleeding | 30 |
| Vaginal discharge       | 4  |
| Irregular bleeding      | 7  |
| Lower abdominal pain    | 9  |
| Loss of weight          | 6  |
| No symptom              | 1  |

The most common symptom was postmenopausal bleeding (81%). In one patient, the lesion was asymptomatic and was discovered on routine pelvic examination.

### Age at Menopause

The age of natural menopause in 30 patients who presented with postmenopausal bleeding is tabulated in Table IV. The age range was from 40 to 60 years with a mean of 50.4 years.

TABLE IV

| Age          | No. of Cases |
|--------------|--------------|
| 40 - 44      | 2            |
| 45 - 49      | 10           |
| 50 - 54      | 10           |
| 55 and above | 6            |
| Unstated     | 2            |
| <b>TOTAL</b> | <b>30</b>    |

### Duration of Symptoms

This is shown in Table V.

TABLE V

| Duration          | No. of Cases |
|-------------------|--------------|
| 1 month           | 6            |
| 1-6 months        | 20           |
| 7 months and over | 5            |
| Unstated          | 6            |
| <b>TOTAL</b>      | <b>37</b>    |

### Histology

This is shown in Table VI.

TABLE VI

|                                      |           |
|--------------------------------------|-----------|
| Adenocarcinoma—poorly differentiated | 5         |
| moderately differentiated            | 10        |
| well differentiated                  | 18        |
| Adenoacanthoma                       | 4         |
| <b>TOTAL</b>                         | <b>37</b> |

### Treatment

Treatment was carried out in 29 patients. The various forms of treatment are shown in Table VII.

TABLE VII

| Method of Treatment  | No. of Cases |
|--|--------------|
| Extended Total Hysterectomy and Bilateral Salpingo-oophorectomy  | 5            |
| Extended Total Hysterectomy and Bilateral Salpingo-oophorectomy: |              |
| with pre-operative radiotherapy                                  | 1            |
| with pre-operative radium  | 5            |
| with post operative cobalt                                       | 2            |
| with post operative radium                                       | 8            |
| Wertheims' Operation   | 2            |
| Wertheims' Operation:  |              |
| with pre-operative radium  | 3            |
| with post operative cobalt                                       | 1            |
| Vaginal hysterectomy and colpoclesis                             | 1            |
| Laparotomy   | 1            |
| <b>TOTAL</b>   | <b>29</b>    |

Two patients had cervical involvement, two metastasis to the ovaries, and one tumor involvement of the bladder and rectum. Internal iliac lymph nodes were found to be involved in two patients; the paraaortic nodes in one.

Eight patients were not treated. Of these, four defaulted after pre-operative radiotherapy; three refused any form of treatment and discharged themselves against medical advice; one presented herself at an advanced stage of the disease with widespread metastasis in the lungs and right ischium.

### Metastasis

The site of metastasis and the time of detection after operation are shown in Table VIII.

TABLE VIII

| Site                  | No. of Cases | Duration After Operation (In Months) |    |
|-----------------------|--------------|--------------------------------------|----|
| Vagina                | 2            | 4                                    | 4  |
| Pelvis                | 2            | 4                                    | 3  |
| Lung                  | 2            | 15                                   | 15 |
| Brain                 | 1            | 12                                   |    |
| Right femur*          | 1            | 15                                   |    |
| Supra clavicular node | 1            | 9                                    |    |

\*This patient had metastasis in the lungs as well.

### Survival

Of the 29 patients that have been followed up regularly, eight patients have died from the disease at the time of this report. Out of these eight patients, four had poorly differentiated adenocarcinoma, three adenoacanthoma and one moderately differentiated adenocarcinoma. The period of survival varied from one week to 15 months after operation. Two other patients died from conditions unrelated to the disease (one from Chronic monocytic leukemia, and the other from bronchopneumonia). There was no evidence of recurrence of metastasis in these two patients at the time of death. The remaining 21 cases are alive and free of recurrence. Seven patients have survived for more than five years and are clinically free from the disease.

### DISCUSSION

Endometrial carcinoma occurs at a later age than carcinoma of cervix. In our series, 46% of patients were between 55-64 years, a finding similar to that in most series.

Statistical evidence shows that women with late menopause have a three fold increased chance of developing endometrial carcinoma (Jeffcoate, 1969). In this series, 53% of patients had menopause at the age of 50 years and over.

The incidence of endometrial carcinoma is said to be highest in nulliparous women and is reported to vary from 26% to 40% (Twombly and Jacobowitz, 1963; Miller *et al*, 1963). Nulliparae accounted for 37% of our patients in this study.

The association of diabetes, obesity and hypertension with endometrial carcinoma is well documented. Way (1954) suggested that this could be the result of overactivity of the pituitary gland. Recently, the influence of endocrine factors in the causation of endometrial carcinoma has been questioned. Dunn and Bradbury (1967) in a prospective study of two groups of patients with vaginal bleeding found no direct evidence of an abnormal endocrine state in the carcinoma group. Diabetes and hypertension were found in 5% and 29% of our patients respectively.

Postmenopausal bleeding was the most common presenting feature, occurring in 81% of cases. Although 70% of cases were seen within 6 months of the onset of symptoms, a significant number of patients still sought medical attention late despite the presence of symptoms and the disease was thus seen in the advanced stage at the first consultation.

In the present series, adenoacanthoma was found in four patients, an incidence of 10.8%. The figure is comparable to that of most reported series.

There is considerable controversy on the ideal treatment for endometrial carcinoma. This accounted for the wide variation in the form of therapy in our present series. The efficacy of the various forms of therapy is difficult to evaluate as the number of cases in our series is small.

It is not possible to compare our survival rates with that of other reports, as the majority of our cases have not passed the 5 year period (except for seven cases). At the time of this report 21 cases out of 29 cases which were treated were alive (73%).

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