

ADENOCARCINOMA OF THE BODY OF THE UTERUS

(A study based on 10 year review of biopsy material)

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Carcinoma of the body of the uterus has received much less attention, while cancer of the cervix is much to the fore. Incidence of carcinoma of the corpus would appear to be increasing. Analysis of female deaths in England and Wales for a five-year period, ending 1952, shows, in the last 3 years, roughly 2 cervical cancers to 1 uterine cancer. But varying percentage incidence of this tumour is given by different writers. Frankl is of the opinion that it forms 11.2 per cent of all malignant neoplasms of female genital tract while Norris and Vogt give a percentage incidence of 15.2. It seems to be much more common than the relatively rare adenocarcinoma of the cervix. Its frequency is also variable, depending upon racial factors. It is relatively more common in Jewish women than is carcinoma of cervix and is less frequent in the negro race than is carcinoma of cervix. Periodical perusal of literature from our country shows a few

recorded cases from time to time and hence the review was undertaken.

Methods and Materials

Biopsy records of Pathology Department of Andhra Medical College were reviewed for the past ten years from 1945 to date and total number of tumours occurring in the female genitalia were recorded. Percentage incidence of uterine neoplasms with other tumours of the female genitalia were noted, with particular reference to adenocarcinoma of the body of the uterus.

Twenty three cases were encountered during this ten year period. Their age incidence, signs and symptoms, gross and histological findings were noted wherever possible. All the sections were stained with haematoxylin and eosin, studied in detail and conclusions drawn. An unusual case report of adenocarcinoma of the body of the uterus with atypical gross appearance of the metastases is recorded below.

Case Report

Hindu female, K.M., aged 40 years was admitted on 23-3-1955 for blood stained discharge per vaginam, pain in the abdomen and low backache for one year. Patient attained puberty at the 15th year and periods were irregular since then, occurring once in 30-60 days, lasting for 4 to 5 days with slightly excessive amount of bleeding. Now and then bleeding was profuse; the last menstrual period was 15 days ago. She is a widow since 8 years, nullipara; no history of abortions.

On vaginal examination, the uterus was found to be enlarged to 10 weeks size, fixed to the left; fornices were free. Speculum examination showed Nabothian follicles of the size of a bean and a mucous polypus at the external os.

Investigations

R.B.C. count: 4.1 mill/cmm. Hb—70%, Blood pressure 130/90.

Blood urea 30 mg. Blood group AB.

Clinical Diagnosis: Fibroid right cornu of the uterus.

On 20-5-1955, under general anaesthesia, abdomen was opened by a subumbilical midline incision. Uterus was found to be firm and symmetrically enlarged to 8 weeks' size. White tubercle like spots were seen on both the tubes. Adnexa were free, there was some difficulty in pushing down the bladder. Small bluish spots were seen on the posterior aspect of the uterus. Subtotal hysterectomy and bilateral salpingo-oophorectomy was done and abdomen closed in layers.

Patient had an uneventful post-operative period.

Gross Specimen.

The specimen consisted of the uterus with both tubes and ovaries. Uterus was enlarged uniformly to 12 weeks' size. There were few dark spots of haemorrhage over the serosal aspect. On cut section, large polypoidal friable mass could be seen filling the uterine cavity, mostly confined to the fundal region of the uterus. The tubes on both sides were seen to contain small hard pearly white subserosal nodules of the size of pin-head bearing close resemblance to tubercles. Cut section of

the tubes revealed the mucosa intact. Ovaries were not enlarged and cut section showed a tiny follicular cyst and an area of haemorrhage.

Microscopic Examination. (Section No. 2061-66/55).

Several sections from the uterus, tubes and ovaries were stained with haematoxylin and eosin. The tumour area was studied in detail and whenever necessary were stained with Van Gieson stain. Sections studied from the tumour area were characterised by marked departure from normal pattern. The endometrium showed increased number of glands with marked hyperplasia. Some of them showed even cystic dilatation (Fig. 1) which only indicated disorderly departure from the normal. There was marked stratification of the gland epithelium with some of these cells showing hyperchromatism and mitotic division of the nuclei. Some of the glands had invaded the myometrium and could be seen surrounded by muscle fibres all round (Fig. 2). Sections studied from the tubes revealed the mucosa to be intact. The subserosal lymphatics were all dilated and filled with glandular deposit, in the lumen of which could be seen some of the secretions of the gland (Fig. 3). This was responsible for giving a tubercle like appearance over the serosal aspect of the tubes to the naked eye. Sections studied from the ovaries did not reveal any abnormality.

Morbid Anatomical Diagnosis

"Adenocarcinoma of the body of the uterus metastasising in both fallopian tubes."

The patient had a course of deep X-ray therapy and is being followed up periodically for any evidence of recurrence.

Comment

The case recorded is atypical in the sense the secondary deposits over the serosal aspect presented a peculiar

appearance to the naked eye bearing a close resemblance to tubercles. Histological study clearly proved that all this was due to the subserosal lymphatics being filled with glandular infiltration, thereby indicating that the spread in this case was through the lymphatics and not direct extension through the mucosa of the tube.

TABLE I
Comparative Incidence of Neoplasm of Female Genitalia
(Andhra Medical College)

	Number	Percent- age
Total number of tumours	985	
Ovarian tumours	100	10.2
Cervix-carcinoma	769	78.3
Adeno-carcinoma	24	2.4
Uterine tumours		
Chorion-epithelioma	30	3.0
Adeno-carcinoma	23	2.2
Fibro-sarcoma	6	0.6
Squamous cell carcinoma	1	0.1
Vaginal carcinomas	14	1.4
Vulval carcinomas	18	1.8

The above table shows that adeno-carcinoma of body forms 2.2 per cent of all the neoplasms and cancer of the cervix is the most frequent of the malignant tumours of the female genital tract forming nearly 80 per cent.

Uterine adenocarcinoma is supposed to be commonly seen in women of post-menopausal age but the average age in this series is 44 years, the youngest being 28 years and the oldest 70 years. The incidence of this tumour in various age groups as observed by us is recorded below.

It is seen that nearly 45 per cent of the cases occurred in the age group of 41-50 years and also equal percentage of cases occurred in younger age

TABLE II
Age Incidence

Age	No. of cases recorded	Percentage
20-30	4	17.4
31-40	6	26.0
41-50	10	43.4
51-60	1	4.4
61-70	2	8.8
—		
23		

group of 20-40 years. The mean age in Miller's recorded 183 cases is 54, whereas Speert in 255 cases observed the mean age to be 56 years. Willis in his 31 cases found the average age to be 57 years, whereas in carcinoma cervix it is 48 years. He is also of the opinion that it is rarely seen below the age of 30 years whereas we have observed 4 cases in this age group. Speert gave an incidence of 5% in 1949 of uterine cancer in young women. Five of his 14 patients were 35 years or younger and were in 35-40 years. Dockerty et al. in 1951 recorded 36 cases of carcinoma affecting women less than 40 years of age, from the Mayo Clinic during the period from 1905-1944. It is noted from the above table that a fairly good percentage of cases occur in younger age group and it is worth while thinking of this condition in this age group also, even though this disease is most frequent in the post-menopausal age group. In all these cases the patients had borne one or more children. The case recorded is a nullipara and had no history of abortions.

In this series all except one had borne children.

Some of the signs and symptoms noted in the 23 cases are as under.

TABLE III
Signs and Symptoms (23 cases)

	No. of cases.
Irregular bleeding ..	23
Menopause ..	6
Nullipara ..	1
Enlargement of uterus ..	23
Leucorrhoea ..	3
Polypoidal growths ..	4

It is seen from the above table that irregular bleeding and enlargement of uterus are seen in all the cases. So one is always justified in thinking of this condition and do a routine endometrial curetting to decide about the nature so as to ensure prompt treatment. Only in 6 cases the woman had attained menopause emphasizing still more the necessity of thinking about these cases in younger age group. In only four cases polypoidal growths could be seen whereas in other cases it was a diffuse involvement of the uterus. Sixteen of these cases showed a clear differentiation into an adenocarcinoma, whereas four cases showed a papillary variant, and three were of anaplastic type where no glandular differentiation could be seen. In only one, the extension could be seen to the cervix and in the case recorded the tubes were involved. In three other cases myometrium was infiltrated with tumour invasion into the lymphatics. In all other cases, there was no proper material available and hence we were unable to judge the incidence of metastases, nor was it possible to follow up these cases as most of them never turned up for a check up. Only the case recorded is being followed up periodically for evidence of metastases.

Summary

1. Statistical analysis of tumours of female genital tract from the biopsy records of Andhra Medical College, Visakhapatnam, for a ten-year period is presented.

2. An atypical case of adenocarcinoma of the body of uterus is recorded.

3. Emphasis is laid on the occurrence of these tumours in younger age group.

4. Stress is laid on the necessity of an endometrial curetting in these cases to establish a diagnosis.

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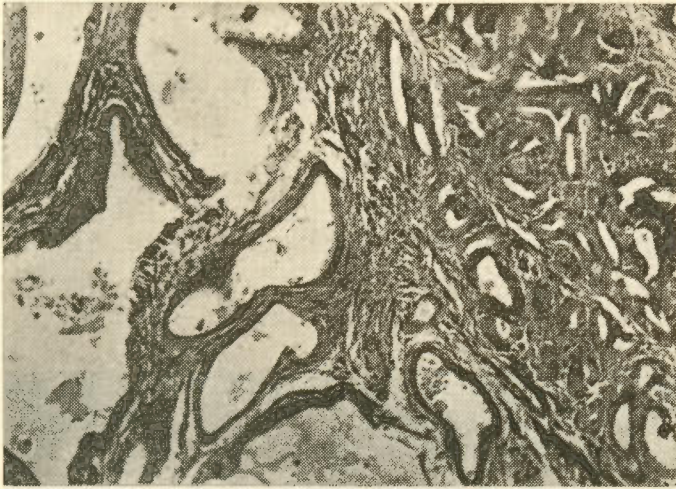


Fig. 1
Photomicrograph illustrates the endometrium showing marked hyperplasia with cystic dilatation of some of the glands.
(H & E x 60)

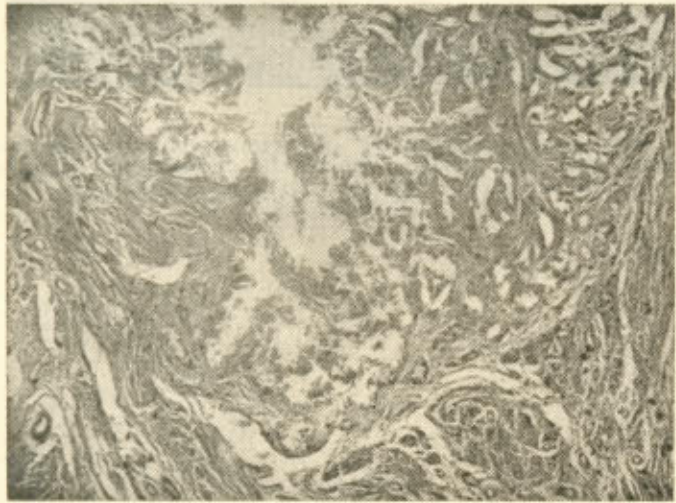


Fig. 2
Photomicrograph shows the endometrial glands involving the myometrium and muscle fibres could be seen all round the glands.
(H & E x 40)

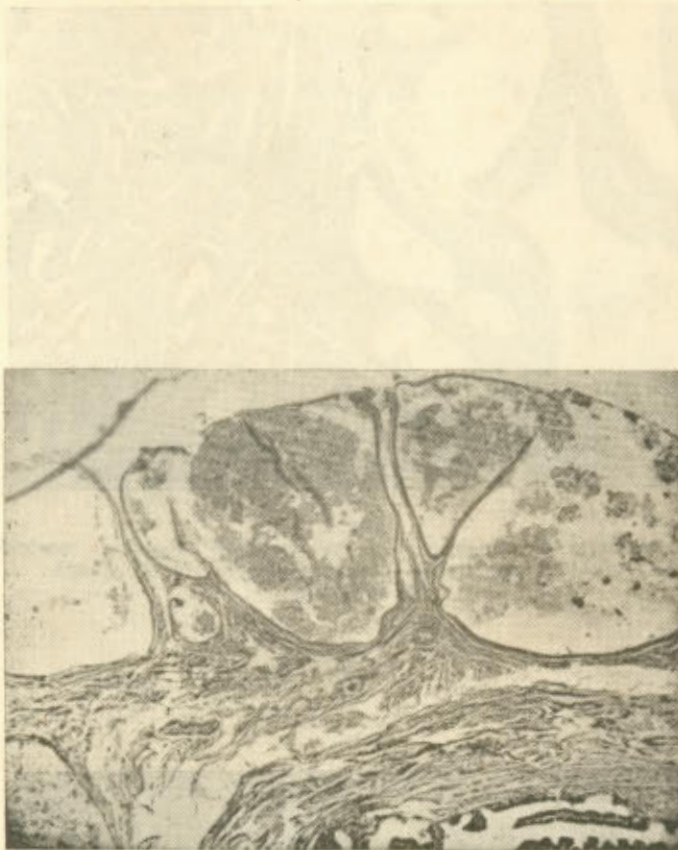


Fig. 3
Photomicrograph illustrates the subserosal lymphatics of the tube dilated, filled with glandular deposit, the lumen being distended with secretion. The normal mucosa is also seen.
(H & E x 40)