UNIT 3 COMMON MALIGNANCIES IN ELDERLY WOMEN

Structure

3.0 OBJECTIVES

After reading this unit, you should be able to:

- recognise the different types of malignancies seen in elderly women;
- describe the epidemiological and risk factors of commonly seen cancers;
- identify high-risk women for screening and prevention;
- describe how to investigate, diagnose and stage the cancer; and
- discuss the optimum therapetic modalities for each cancer

3.1 INTRODUCTION

In this unit you will learn about the malignancies commonly seen in elderly women in India. On the preventive side, it is important to develop adequate strategies for screening of these conditions, to modify high-risk lifestyles and to detect and treat pre-malignant conditions.

It is vital that malignant conditions are detected early and treated adequately and appropriately. For this purpose, it is important that elderly women and their families understand and report warning signs and symptoms, and that physicians have a high index of suspicion based on sound knowledge.

In this unit, the salient features of epidemiology, pathology, clinical presentation, diagnosis, treatment and prevention of these cancers have been described.

3.2 CANCER OF THE UTERINE CERVIX

Cancer cervix is the commonest malignancy of the female genital tract in India. The distribution of cases is bimodal with one peak at 35-39 years and another at 55-60 years but you may see patients at all ages.

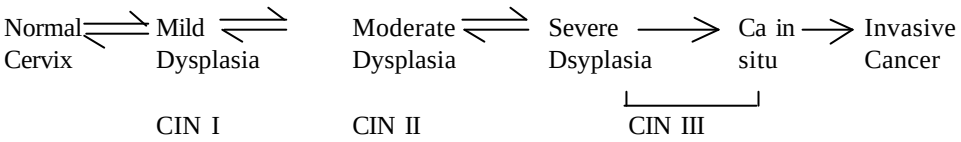
Invasive cancer of the cervix has been considered a preventable cancer because it has a long preinvasive state, because cervical cytology screening programs are available and because the treatment for preinvasive lesions is effective. In the west, the incidence of cervical cancer is decreasing and it is being diagnosed earlier, leading to better survival rates.

3.2.1 Epidemiology

Some women are at very high risk of cancer cervix. The main factors are early age at first intercourse, multiple sexual partners, infection with human papilloma virus (HPV) and HIV and contact with a high risk male. A high risk male is one with multiple sexual partners (men with travelling jobs, e.g., salesmen, truck drivers, etc are suspect) or one whose previous wife died of cancer cervix. Factors of lesser importance are smoking, poor hygiene, other sexually transmitted diseases and contraceptive methods other than barrier methods.

3.2.2 Premalignant Lesions

The natural history of cancer cervix is as follows:



As you can see from the diagram above, up to the stage of severe dysplasia, the process is reversible, but once carcinoma in situ develops it will progress to invasive cancer. The total time taken to progress from mild dysplasia to invasive cancer is usually about 10 years. Rarely a case may progress very rapidly, directly from dysplasia to invasive cancer without going through the intermedate stages. This is likely in immunocompromised states e.g. HIV infection. The terminology cervical intraepithelial neoplasia (CIN) is also used to describe the various degrees of dysplasia. HPV infection especially with Type 16/18, 31 and 33 is especially associated with CIN.

3.2.3 Pathology

Ninety-five per cent of cervical malignancies arise from the transformation zone, i.e. the junction of the squamous and columnar epithelium at the level of the external os; 90-95% are squamous cell carcinomas and the rest are adenocarcinomas. The squamous cell carcinomas are further divided as large cell keratinising (20%), large cell non keratinising (60%) and small cell carcinomas (20%). Prognosis is best with the first and worst with the last of these types.

Adenocarcinomas may be pure or sometimes mixed with squamous cells (adenosquamous carcinoma). Other rare variants like mucoepidermoid and glassy cell carcinoma and sarcoma have also been occasionally described. Adenocarcinomas have a worse prognosis than squamous cell carcinomas.

Spread is mainly by direct extension and through lymphatics. Spread through the blood stream is uncommon.

Check Your Progress 1

1) Who are the women at high risk of cancer cervix?

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2) What is the natural history of cancer cervix?

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3) Which are the common pathological types of cervical cancers?

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3.2.4 Clinical Features

The patient usually presents with irregular bleeding and/or discharge per vaginum. Bleeding is usually intermenstrual– initially scanty and at times heavy. History of bleeding following coitus is typical of cancer cervix but straining at stool or any circumstance which exposes the cervix to trauma may cause bleeding from the fragile vessels in the tumour. Some women may present with postmenopausal bleeding. Vaginal discharge associated with carcinoma cervix is usually offensive and has a characteristic odour. Other symptoms such as urinary incontinence, deep pelvic ache, edema of legs and loss of weight are seen in patients with advanced disease. Massive haemorrhage and uraemia are usually seen as preterminal events.

On general physical examination, you should palpate the supraclavicular and groin lymph nodes to exclude metastatic disease. On pelvic examination, a speculum is inserted into the vagina. The cervix is inspected for suspicious areas and the vagina for spread of disease. With premalignant lesions you may see only a cervical erosion which may bleed on touch. Invasive cancer can be seen as an ulcerative, proliferative or nodular growth on the cervix. It is usually friable and bleeds on touch. The cervix is very firm, may be enlarged and base of growth/ulcer is indurated. These features can be evaluated by digital examination. You should also assess the extent of spread of the growth. The uterus is usually freely mobile in early stages but mobility gets restricted later with spread of growth into the parametrium. The parametrial involvement is best evaluated by rectal examination especially in menopausal women. It remains free and supple in early stages and is thickened, indurated and nodular in late stages, eventually the thickening extending upto the lateral pelvic wall.

Check Your Progress 2

1) What are the common symptoms of cervical cancer?

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2. What are the signs of a "suspicious" cervix?

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3.2.5 Diagnosis and Staging

A number of investigations are required to be performed for diagnosis and staging.

PAP smear is a method of screening where no obvious cervical lesion is seen. Let us learn how it is taken.

The Ayre's spatula is inserted into the endocervical canal and rotated through 360^0 in order to collect material from the squamocolumnar junction of the cervix. Vaginal smear is collected from the posterior fornix. Both the samples are spread on a glass slide which is fixed immediately in 95% alcohol. The smear is stained by the Papanicolaou technique.

Colposcopy: It provides a magnified view of the cervix and is useful in locating the site of biopsy when no lesion is visible and Pap smear is showing abnormality. Application of 3% acetic acid and Lugol's iodine help in visualization of abnormal areas which are acetowhite and iodine negative respectively.

Cervical biopsy: In the presence of an obvious lesion, a punch or wedge biopsy from the margin helps in diagnosis. In the absence of a lesion, a colposcopy guided biopsy or ring biopsy may be taken.

Endocervical curettage: In suspected endocervical cancer when the cervix feels barrel-shaped, endocervical curettage is helpful.

Differential diagnosis: The main differential diagnosis is from cervical tuberculosis, fibroid polyp (especially when infected), cervical mucus polyp and benign cervical erosion.

Staging: Though the staging of cancer cervix is clinical, certain procedures are part of the staging procedure.

1) **Cystoscopy** — may be done if bladder involvement is suspected
2) **Intravenous pyelogram** — for urinary tract involvement
3) **Proctoscopy** — for involvement of the rectum
4) **Ultrasound and CT scan** are helpful to know the degree of extension and in follow-up.

FIGO Staging

Stage 0 – Carcinoma in situ/intra-epithelial carcinoma

Stage 1 – Carcinoma confined to the cervix.

Stage 1a – Preclinical carcinoma (Diagnosed only by microscopy)

Stage 1a1 – Minimal microscopically evident stromal invasion

Stage 1a2 – Lesion detected microcopically that can be measured — depth of invasion not greater than 5 mm taken from the base of the epithelium, horizontal spread not exceeding 7 mm

Stage 1b – Any lesion greater than stage 1a2

Stage 1b1 – < 4cm size of growth

Stage 1b2 – >4cm size of growth

Stage II – Extends beyond cervix but not upto pelvic wall. The carcinoma involves the vagina but not as far as lower third

Stage IIa— No obvious parametrial involvement

Stage IIb— Obvious parametrial involvement

Stage III— Carcinoma extended to the pelvic wall or involves lower third of vagina.

Stage IIIa— No extension to the pelvic wall but to the lower third of vagina

Stage IIIb— Extension to the pelvic wall or hydronephrosis or non-functioning kidney.

Stage IV— Carcinoma has extended beyond the true pelvis or has involved the mucosa of bladder or rectum.

Stage IV— a-Spread to adjacent organs
b-Spread to distant organs

Check Your Progress 3

1) Indicate True (T) or False (F):

a) Pap smear is done only for screening. (T/F)

b) Colposcopy must be done before cervical biopsy when an ulcer is visible. (T/F)

c) IVP is essential for staging of cancer cervix. (T/F)

d) Iodine application detects abnormal areas of the cervix. (T/F)

2) Match the following:

a)	Stage I	i)	Hydronephrosis
b)	Stage II	ii)	Bladder involvement
c)	Stage III	iii)	Extension to vagina
d)	Stage IV	iv)	Microscopic diseases

3.2.6 Management

The two modalities for primary treatment are surgery and radiotherapy. In the elderly age group, radiotherapy is the treatment of choice in all stages of the diseases as surgery i.e., radical hysterectomy type III or modified Wertheim's hysterectomy is an extensive surgery and elderly patients, especially if they have medical disorders, are unable to tolerate such procedures. However, if the patient is medically fit, early stage disease (Stage I or II A), adenocarcinoma with tumour size <4 cm diameter she can be considered for radical hysterectomy after proper counselling. In this procedure, the uterus, tubes, ovaries, parametrium, upper one third of vagina and pelvic lymph nodes are removed. Complications of the procedure include haemorrhage, utero and vesicovaginal fistula, pulmonary embolism, small bowel obstruction and febrile morbidity. Subacute complications include postoperative bladder dysfunction and

lymphocysts formation. Have you seen any cases after radical hysterectomy? Radical radiotherapy (RT) involves both external radiotherapy (45-50 Gy) and intracovitary brachytherapy (25-35 Gy). Such curative RT is suitable for stages I, II, and early III diseases.

Patients who have received radiotherapy may develop intestinal and urinary strictures and fistulae, fibrosis in the vagina and pulmonary embolism during intracavitary therapy. Neoadjuvant chemotherapy with cisplatinum,vinblastine/ifosfamide, 5-FU, and bleomycin has been seen to be helpful in reducing tumour size before radiotherapy/surgery.

Prevention of cancer cervix requires all women to have Pap smear once in 2-3 years in detecting dysplasia and their management. If this is not feasible, at least all high risk women shoul be evaluated. Health workers can be trained to recognise a suspicious cervix on speculum examination and refer these patients for further investigation and management. This is called clinical downstaging of cancer cervix-trying to catch more cases in earlier stages for better results.

Check Your Progress 4

1) What are the treatment options for cancer cervix in the elderly patient?

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2) Which is the patient who can be considered for radical surgery?

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3) How can cancer cervix be prevented?

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3.3 CANCER OF THE UTERUS

The commonest cancer of the uterus is endometrial carcinoma. It is said to be a disease of affluent countries. It is the commonest pelvic malignancy in women in the West. In India it accounts for 3% of all genital malignancies. Sarcomas are seen less frequently.

2.3.1 Epidemiology

Risk factors for endometrial carcinoma are well-established.

Age: Endometrial carcinoma is a disease which spans the reproductive and menopausal years mostly in the post-menopausal years. The largest number of cases are found in the age group 55 to 59 years. Only 5% of patients with endometrial carcinoma are under 40 years of age.

Obesity, nulliparity and late menopause: This classic triade has been associated with endometrial cancer and is thought to act by increasing the exposure to estrogen.

Associated medical diseases: Hypertension and diabetes mellitus are frequently associated with endometrial cancer. Immunodeficiency diseases and immuno-suppressive states are also highly correlated with the development of malignancy.

Hormone secreting tumours: Endometrial cancer can occur in patients with hormone-secreting tumours particularly of the ovary. Highest correlation has been noted with feminizing ovarian tumours.

Polycystic ovary syndrome: Endometrial carcinoma has been reported to be as high as 25% in patients with Stein-Leventhal syndrome.

Ovarian dysgenesis: Patients with ovarian dysgenesis have also been reported to be at high risk because of long-term supplemental estrogen that is given to these individuals.

3.3.2 Clinical Features

Patients present with irregular bleeding and discharge per vaginum in the peri- or post-menopausal age group. Bleeding is not usually heavy. Usually, this is the only symptom. Some patients may also complain of pain in the hypogastrium or both iliac fossae. It is usually not severe and tends to appear at the same time each day, lasting only 1-2 hours known as 'Simpson's pain'. It is probably caused by expulsive uterine contractions.

On examination patients are often obese and hypertensive. On local examination, the cervix is usually healthy. A fleshy polypoidal mass may be seen projecting through the cervix in case of sarcoma. The size of the uterus may be small or enlarged and may be mobile or fixed depending on the stage of disease.

3.3.3 Diagnosis and Staging

PAP smear: Only one third to one half of patients with adenocarcinoma of the uterus have abnormal PAP smear. Hence the efficacy of PAP smear in diagnosing endometrial cancer is poor.

Diagnostic fractional curettage (D&C): Curettings are taken from the cervix, isthmus and body of the uterus. It occasionally fails as growths are missed with the curette. Moreover small senile uterus invaded by growth can be easily perforated. Modern technique of endometrial aspiration with cannula introduced just beyond the cervix and then aspirated with 20cc syringe avoids this complication. Moreover it provides more representative sample and can be done as an out-patient procedure.

Hysteroscopy is done only if clinical suspicion is strong and histopathology is negative. With this biopsy of focal lesion can be taken which may be missed by D& C. Moreover endocervical canal can also be evaluated.

Ultrasound and colour Doppler are being evaluated as screening methods. Ultrasound is also helpful in staging of the disease.

CT scan: To assess the magnitude of abdominal spread as well as presence or absence of extra abdominal spread and lymph node involvement.

MRI (Magnetic Resonance Imaging): Deep myometrial invasion as well as cervical involvement are accurately detected.

Staging

Endometrial cancer is a surgically staged disease. FIGO (1988) staging system of endometrial cancer is as follows:

Stage 1	:	Endometrial carcinoma confined to corpus uteri.
Stage 1a	:	Tumour limited to endometrium
Stage 1b	:	Invasion to less than 1/2 of myometrium
Stage 1c	:	Invasion to greater than 1/2 of myometrium.

Stage II	:	Endometrial cancer involves the corpus and the cervix but has not extended outside the uterus.
Stage II a	:	Endocervical glandular involvement only.
Stage II b	:	Cervical stromal invasion.
Stage III	:	Endometrial cancer extends outside the uterus but is confined to the true pelvis.
Stage III a	:	Tumour invades serosa and/or adnexa and/or positive peritoneal cytology.
Stage III b	:	Vaginal metastases.
Stage III c	:	Metastases to pelvic and/or para-aortic lymph nodes.
Stage IV	:	Endometrial cancer involves the bladder or bowel mucosa or has metastasized to distant sites.
Stage IV a	:	Tumor invasion of bladder and/or bowel mucosa.
Stage IV b	:	Distant metastases including intra-abdominal and or inguinal lymph nodes Endometrial cancer can be grouped with regard to the degree of differentiation of adenocarcinoma as follows:

Grading is done according to the degree of differentiation of carcinoma.

G1-5% or less of a non-squamous or non-morular solid growth pattern

G2-6%-50% of a non-squamous or non-morular solid growth pattern

G3-More than 50% of a non-squamous or non-morular solid growth pattern.

3.3.4 Management

The management of endometrial cancer is primarily surgical. All patients who are fit for surgery and anaesthesia should be primarily managed by surgery.

After opening the abdomen, peritoneal cytology should be taken by washing with heparinised saline. After exploring the abdomen and pelvis, a standard operative procedure that is extrafascial total abdominal hysterectomy and bilateral salpingo-oophorectomy is done, followed by selective pelvic and para-aortic lymphadenectomy.

Indications for selective lymphadenectomy are:

- deep myometrial invasion,
- grade 2 or 3 tumour,
- cervical invasion,
- adnexal involvement,
- papillary serous and adenosquamous type of tumour.

Post-operative adjuvant therapy mainly radiotherapy depends on the stage of disease and associated risk factors.

Indications for post-operative radiotherapy are:

- Grade 3 tumour,
- Cervical stromal involvement,
- Presence of deep myometrial invasion, and
- Pelvic nodal or adnexal involvement.

Hormone therapy with high doses of medroxyprogesterone acetate has been tried with some success especially in cases of recurrent disease. Chemotherapy has a limited role, mostly in inoperable cases with intra-abdominal or distant spread. In sarcomas too, the results of chemotherapy are not encouraging.

Check Your Progress 5

1) What are the risk factors for developing endometrial carcinoma?

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2) What is the best course of management of uterine cancer?

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3) What are the indications for radiotherapy in endomterial cancer?

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3.4 CANCER OF THE OVARY

Ovarian cancer accounts for 4% of all cancers among women and is the second commonest genital cancer in India.

3.4.1 Pathology

About 70-80% of primary ovarian tumours are of epithelial origin, 10% are stromal and 5% are of germ cell origin whilst the remainder fall into other groups. WHO has classified ovarian tumours into nine main groups.

Table 3.1: WHO Classification of Ovarian Tumours

1)	Epithelial tumours
2)	Sex cord stromal tumours
3)	Germ cell tumours
4)	Lipid cell tumours
5)	Gonadoblastoma
6)	Soft tissue tumours not specific to the ovary
7)	Unclassified tumours
8)	Secondary (metastatic) tumours
9)	Tumour-like conditions

In elderly patients, the commonest tumors are epithelial and secondary.

3.4.2 Clinical Features

Primary ovarian neoplasms are most commonly found in women aged 40-60 years. Presentation is very insidious and most patients are in stage III or IV at presentation. The patient complains

of pain, bloating sensation or mass per abdomen. Often there may be history of indigestion, vomiting, frequency of micturition due to large mass or associated ascites. Irregular or post-menopausal bleeding is uncommon. There may be edema of the legs or vulva. Cachexia is seen with large growths. In about 2-3% of patients there may be a family history of ovarian cancer.

On examination you may find a palpable mass or ascites. Ovarian tumours are always dull to percussion with areas of resonance in the flanks. On pelvic examination the mass is usually irregular, nodular and fixed. Rectal examination usually reveals nodules in pouch of Douglas. Occasionally thrombophlebitis may be present. Usually in postmenopausal women the ovaries atrophy and cannot be palpated. Therefore, if you find a palpable ovary in a postmenopausal woman you should look for a possible ovarian tumour.

Check Your Progress 6

1) What are the different types of ovarian tumours?

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2) What are the common presenting symptoms of ovarian cancer?

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3.4.3 Diagnosis and Staging

The various conditions in differential diagnosis of ovarian cancer can be: mesenteric cyst, retroperitoneal tumour, hydatid cyst, large hydromephrosis, ascites and distended bladder.

Imaging techniques: The following investigations are useful for distinguishing them and reaching a conclusive diagnosis:

Ultrasound and computed tomography are useful in diagnosis and preoperative evaluation. Free availability of ultrasound is helping to diagnose more ovarian masses at an earlier stage.

Tumour markers

CA 125 estimation is helpful in follow-up of patients with epithelial ovarian tumours and not in diagnosis as it may be raised in many benign conditions with peritoneal involvement, i.e. endometriosis, tuberculosis, etc. Alpha fetoprotein (AFP) and human chorionic gonadotropin (hCG) are useful markers in patients with germ cell tumours.

Upper GI endoscopy and barium enema are required to rule out a primary in the gastro-intestinal tract.

Staging

FIGO staging is surgical staging done at laparotomy.

Stage I. Growth limited to the ovaries.

Ia. Growth limited to one ovary, no ascites, no tumour on external surface, capsule intact.

Ib. Growth limited to both ovaries, no ascites, no tumour on the external surface, capsule intact.

Ic. Tumour either stage 1a or 1b but with tumour on surface of one or both ovaries or with capsule ruptured; or with ascites present containing malignant cells with positive peritoneal washings.

Stage II. Growth involving one or both ovaries with pelvic extension.

II a. Extension and/or metastases to the uterus and/or tubes

II b. Extension to other pelvic tissues

II c. Tumour either stage II a or II b but with tumour on surface of one or both ovaries or with capsule (s) ruptured; or with ascites present containing malignant cells with positive peritoneal washings.

Stage III. Tumour involving one or both ovaries with peritoneal implant outside the pelvis and/ or positive retroperitoneal or inguinal nodes. Superficial (Capsule) liver metastasis equals stage III.

Tumor is limited to the true pelvis but with histologically proven malignant extension to small bowel or omentum.

III a. Tumour grossly limited to the true pelvis with negative nodes but with histologically confirmed microscopic seeding of abdominal peritoneal surfaces.

III b. Tumour of one or both ovaries with histologically confirmed implants of abdominal peritoneal surfaces with none exceeding 2 cm in diameter. Nodes are negative.

III c. Abdominal implants greater than 2 cm in diameter and/or positive retroperitoneal or inguinal nodes.

Stage IV. Growth involving one or both ovaries with distant metastases. If pleural effusion is present there must be positive cytology to allot a case to stage IV. Parenchymal liver metastases equal stage IV.

Are you clear about the staging? Read it once again. You can see from the staging that the main pattern of spread is by direct spread and intra-abdominal extension.

3.4.4 Management

Primary method of diagnosis and therapy is surgery. Ovarian cancer is a surgically staged disease. Hence every patient who is medically fit for surgery should be subjected to exploratory laparotomy to make a correct histopathologic diagnosis and reduce tumour bulk. The aim of surgery is maximum debulking effort. The abdomen is opened through a vertical midline incision. Ascitic fluid if present is sent for cytology in a heparinised container. Otherwise peritoneal washings are taken from the paracolic gutters, pouch of Douglas and subdiaphragmatic area with heparinised saline and transported immediately to the cytology laboratory. All abdominal organs and retroperitoneal lymph nodes are palpated for evidence of metastasis. The aim is to do a total abdominal hysterectomy with bilateral salpingo-oophorectomy and partial omentectomy, with multiple peritoneal biopsies especially from suspicious areas. The amount of residual disease is recorded.

Role of chemotherapy

All patients beyond Stage 1a require postoperative chemotherapy. Combination chemotherapy is used nowadays for epithelial ovarian cancers. Cisplatinum-based regimens are the first line

e.g. CP (cyclophosphamide, cisplatinum), or CAP (with adriamycin). Of late, taxol is available for use as first- or second-line chemotherapy. The drugs are usually given at 4-weekly interval. Blood counts are to be checked prior to each cycle to make sure there has not been severe depression of bone marrow. Six cycles of therapy are followed by second look laparotomy or follow up with CA 125 levels.

Prognosis

It depends on the histological type, degree of differentiation and the clinical stage when diagnosed. With regard to the type of tumour, the granulosa cell tumour has the best prognosis because it tends to grow slowly and recurrence is infrequent or delayed. Of the epithelial tumors which form the majority, the mucinous and endometroid tend to present early and therefore have a better prognosis than serous cystadenocarcinoma which presents late. The worst prognosis is for women who have unclassified undifferentiated solid carcinoma or adenocarcinoma. Prognosis is also correlated with the amount of residual disease.

Check Your Progress 7

1) What is the differential diagnosis of an ovarian tumour?

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2) What is the ideal surgical management in ovarian cancer in the elderly woman?

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3) What regime of chemotherapy is recommended in epithelial ovarian cancer?

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4) Match the following:

a) Growth involving one ovary and fallopian tube	i) Stage I
b) Tumour in one ovary and pleural effusion with positive cytology.	ii) Stage II
c) Tumour in one ovary with ascites	iii) Stage III
d) Tumour in one ovary and omentum	iv) Stage IV

3.5 CANCER VULVA

Although cancer vulva is an uncommon cancer, accounting for about 2-3% of malignancies of the genital tract, you will encounter these cases in your practice from time to time.

3.5.1 Premalignant Lesions

Premalignant lesions of the vulva range from vulvar intraepithelial dysplasia (VIN) that is biologically and histologically similar to dysplasia of the cervix or vagina to the more

aggressive carcinoma in situ (VIN III). Many of the squamous intraepithelial lesions of the vulva are associated with HPV, particularly type 16/18, 31, 33, 35 and 51. The milder forms of VIN appear as pale areas. More severe forms are seen as papule or macules, coalescent or discrete, single or multiple. There may be white plaques or sometimes, pigmented lesions.

Diagnosis is aided by the application of acetic acid for 5 minutes or longer, or 1% toluidine blue. Biopsy should be taken under local anesthesia with a Keyes punch biopsy forceps from suspicious areas and from areas of hypertrophy and ulceration.

Untreated VIN lesions can progress to invasive cancer in 2-3 years. Surgical excision is the mainstay of therapy. Small lesions can be excised with cautery or laser. Cryosurgery can be done for early dysplasia. More extensive lesions may require vulvectomy.

3.5.2 Pathology

Approximately 90-92% of all invasive vulval cancers are of the squamous cell type. Other types of cancer seen are melanoma, basal cell carcinoma, Bartholin gland carcinomas (adenocarcinoma, squamous cell, transitional cell and adenoid cystic carcinoma), metastatic carcinoma, sarcoma and carcinomas of the appendages e.g., hidradenocarcinoma.

3.5.3 Clinical Features

Squamous cell carcinoma of the vulva is predominantly a disease of postmenopausal women. The mean age at diagnosis is about 65 years. The patients may present to you with a vulvar mass or ulcer. Often there is a long history of pruritus. Less common presenting symptoms include vulvar bleeding, discharge or dyspareunia. Occasionally a large metastatic mass in the groin may be the initial presenting symptom.

On examination, the lesion is usually raised and may be fleshy, ulcerated, leukoplakic or warty in appearance. Most of the lesions are located on the labia majora, occasionally on the labia minora, clitoris or perineum. About 5% may be multifocal.

3.5.4 Diagnosis and Staging

Diagnosis requires a wedge or Keyes' punch biopsy which can be taken under local anesthesia. Biopsies should be taken from areas of hypertrophy, ulceration, excoriation and from confluent warty lesions. A Pap smear should be taken from the cervix and colposcopy of the cervix and vagina should be performed because of the common association with other squamous intraepithelial neoplasms of the lower genital tract.

Staging

The FIGO (1988) and TNM staging are shown below along with the clinical/pathological findings:

FIGO	TNM	Clinical/Pathological Finding
Stage 0	T1S	Carcinoma in situ
Stage I	T_1 No Mo	Tumour confined to the vulva or perineum <2 cm in greatest dimension, nodes negative
Stage Ia		Stromal invasion < 1 mm
Stage Ib		Stromal invasion > 1 mm
Stage II	T_2NoMo	Tumour confined to the vulva and/or perineum >2cm in greatest, dimension, nodes negative
Stage III	T_3No Mo T_2N_1Mo T_1N_1Mo T_2N_1Mo	Tumour of any size with 1. Adjacent spread to the lower Urethra, vagina or the anus 2. Unilateral regional lymph node metastasis
Stage IV A	T_1N_2Mo T_1N_2M0 T_3N_2M0 T_4 any N Mo	Tumour invades any of the following Upper urethra, bladder or rectal mucosa, pelvic bone or bilateral regional nodes.
Stage IV B	Any T, any N, M_1	Any distant metastasis including pelvic lymph nodes.

3.5.5 Management

Management is primarily surgical. Although radical vulvectomy has been regarded as the standard treatment for the primary vulvar lesion, this operation is associated with considerable morbidity, wound breakdown, prolonged period of convalescence and significant disturbances of several function and body image. Radical local excision of T1 tumours i.e. <2 cm. diameter, with a 1 cm tumour free surgical margin and node excision through separate incisions, is found to have the good results.

With T2 and early T3 tumours and NO-1 nodes, radical vulvectomy with bilateral inguinal femoral lymphadenectomy is the treatment of choice. Sometimes preoperative radiotherapy allows less radical dissection.

Patients with advanced disease i.e., large T3 or T4 primary tumour are advised radiotherapy but results are poor. However, newer techniques and concomitant use of chemotherapy may improve the outcome in the future.

Check Your Progress 8

Fill in the blanks:

a) The commonest type of vulval cancer is .....

b) Pre-malignant lesions of vulva include .....

c) Diagnostic and staging procedures include .....

d) Surgical treatment of early stage disease is .....

3.6 LET US SUM UP

In this unit you have learnt about the genital tract cancers commonly seen in elderly women. It is important to remember cancer in the differential diagnosis of any ulcerative, proliferative or mass lesion in this age group. You must also remember that effective therapy is available for early stages of all these cancers so it is important to advise elderly women about an appropriate protocol for regular check-ups. Further, high risk factors are recognised and well - established for all cancers and these women should be particularly targeted for prevention, early detection and treatment.

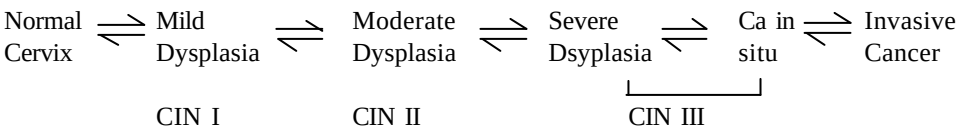
3.7 ANSWERS TO CHECK YOUR PROGRESS

Check Your Progress 1

1) Women having the following are at high risk:

   Early age at first intercourse, multiple sexual partners, HPV and HIV infection, contact with high risk male, smoking, poor hygiene, other STD's, non-usage of barrier contraception.

The natural history of cancer cervix is as follows:



3) The common types of cervical cancer are squamous cell carcinoma, large cell keratinising, large cell non keratinising and small cell carcinomas, adenocarcinoma, adenosquamous carcinoma, muco-epidermoid and glassy cell carcinoma, sarcoma.

Check Your Progress 2

1) Common symptoms of cervical cancer are irregular bleeding which is postcoital or intermenstrual, vaginal discharge. In late stages, urinary incontinence, deep pelvic ache, edema of legs, loss of weight, massive haemorrhage, symptoms of uraemia.

2) Signs of suspicious cervix are enlarged cervix with ulcerative, proliferative or nodular lesion which is friable and bleeds on touch.

Check Your Progress 3

1) a) T
   b) F
   c) T
   d) T
2) a) i
   b) iii
   c) i
   d) ii

Check Your Progress 4

1) Radiotherapy is the mainstay in all stages. Surgery can be done if patient is fit medically. Chemotherapy has limited role.

2) Early stage disease (I or II A), medically fit patient with tumour size <4cm diameter, are the conditions in which radical surgery can be considered as an option.

3) Pap smear in all women every 2-3 years but especially in all women of high risk category and if suspicious cervix on clinical examination, can go a long way in ditecting dysplasias which are reversible and preventing cancers.

Check Your Progress 5

1) Risk factors for developing endometrial corcinoma are: postmenopausal women over 55 years, obese, multiparous, late menopause, hypertensive, diabetic, immunosupressive states, hormone secreting tumours, polycystic ovary, ovarian dysgenesis or hormone replacement.

2) Extrafascial hysterectomy with bilateral salpingo-oophorectomy along with peritoneal cytology with lymph node sampling is usually the best course of managment of uterine cancer.

3) Grade 3 tumour, cervical stromal involvement, deep myometrial invasion, pelvic node or adnexal involvement are the indication for radio therapy in endometrial cancern.

Check Your Progress 6

1) Ovarian tumours are classified as epithelial, sex cord stromal, germ cell, lipid cell, gonadoblastoma, soft tissue tumours, unclassified and secondary tumours.

2) Pain, bloating, abdominal lump, gastrointestinal symptoms, frequency of micturition are common presenting symptoms of ovarian cancer.

Check Your Progress 7

1) Differential diagnosis of orarian tumour are:

   — Mesenteric cyst

   — Retroperitoneal tumour

— Hydatid cyst

— Large hydronephrosis

— Ascites

— Pregnancy

— Distended bladder

2) Exploratory staging laparotomy with peritoneal cytology, total abdominal hysterectomy with bilateral salpingo-oophorectomy, infracolic omentectomy and multiple peritoneal biopsies is the ideal surgical management in ovarian cancers in elderly women.

3) Cyclophosphamide cisplatinum (CP) or CAP (with adriamycin) given at 4-weekly interval for six cycles.

4) a) ii
   b) iv
   c) i
   d) iii

Check Your Progress 8

a) Squamous cell carcinoma

b) Dysplasia (VIN) and carcinoma in situ (VIN III)

c) Biopsy, pap smear from cervix and colposcopy of cervix and vagina

d) Radical local excision and node excision.

3.8 FURTHER READINGS

Berek, J.S. et. al., Novak's Gynaecology, 12th ed., Williams & Wilkins, 1996.

Disaia P.J., *Clinical Gynaecologic Oncology,* Mosby Publication, 5th ed.