2.12 MISCELLANEOUS ISSUES IN THE ELDERLY

1. CANCER

Cancer is one of the five common causes of death in elderly Indian. With increase in the incidence and prevalence of cancer of all types physicians are more likely to encounter older patients with cancer[53].

Awareness about the symptoms and signs among home care givers, family physicians and other health professionals will facilitate early diagnosis of these cancers. Palliative care is an integral to satisfactory medical support.

Ageing process is known to be the single greatest risk factor for the development of cancer. Currently, in the developed countries more than 50-60% of all cancers occur beyond 65 years of age. In India, 1 in 5 cancers are now detected in persons beyond 60 years of age. Demographic changes in developing countries like India will increase the aged population, from less than 10% of the population at present to 20% or more by the year 2020. Such a double-fold rise will result in increased cancer burden amongst the elderly persons. It has been observed that a rapid increase in incidence of certain specific cancers occur in the aged persons. Majority of the solid cancers (of lung, head and neck, gastro-intestinal tract, genitor-urinary system, breast, prostate and central nervous system) show a tendency for cancer development after the 5th and 6th decades of life. Similarly, advancing age increases the risk for some hematologic malignancies. In the developed countries; the common neoplasms afflicting the elderly population are those of lung, prostate, breast, colon and rectum, uterus, lymphomas and pancreas. The developing countries like India show certain differences and the common cancers of the elderly are: lung, stomach, cervix, head and neck, breast, esophagus, liver, colon and rectum and lymphomas. Those with high rate of death in the geriatric age groups in India are head and neck, lung, cervix and esophagus malignancies. The cancers of the head and neck region and uterine cervix are the two most prevalent cancers in India. These two sites are easily accessible for physical and diagnostic examinations[54].

Common Presenting Symptoms and Signs

Symptoms of cancer are not necessarily exclusive and may quite often be similar in nature to many other non-cancerous conditions. Thus, it is necessary to have a high index of suspicion while evaluating all elderly patients for the cancer diagnosis. In general, whenever there is non-healing ulcer that bleeds on touch, stony hard swelling, unexplained weight loss, fatigue, anaemia etc., it should be investigated for cancer. Some of the dominating organ specific signs and symptoms can be enumerated as follows:

Head and Neck: Non-healing ulcer, tumour, pain in oral cavity and throat, difficulty in swallowing, change in voice, swelling in the neck.

Lung: Chronic cough, blood in sputum (hemoptysis) respiratory distress, chest pain, recurrent pulmonary infection, enlarged lymph glands.

Upper GIT (esophagus, stomach): Dysphagia, anorexia and weight loss, hematemesis, vomiting, aspiration pneumonia.

Lower GIT (colo-rectal, and anal): Alteration in bowel habits (constipation/ diarrhoea), bleeding or discharge per rectum, tenesmus, palpable mass in abdomen, intestinal obstruction.

Genitourinary: Hematuria and weight loss.

Cervix: Bleeding/ discharge per vaginam, post coital bleeding, low backache/pain in abdomen.

Uterus: Irregular bleeding, discharge per vaginum, pain in hypogastrium region

Ovary: Pain and bloating sensation or palpable mass in abdomen, cachexia, edema of the legs or vulva

Prostate: Increased frequency and urgency, dysuria, dribbling of urine, decreased flow of stream, constipation.

Bladder: Painless hematuria, pain abdomen, urinary retention.

Breast: Palpable lump, bleeding/ discharge from nipple, lump in the axilla.

Hematologic (lymphoma/ leukemia): Pallor, generalized weakness, fever, weight loss, recurrent chest and urinary infections, petechial haemorrhage, bleeding from nose and gum, joint pain, painless palpable lymph nodes, organomegaly (hepato-splenomegaly).

Central Nervous system: Headache, vomiting, seizures, diminution of vision, motor/sensory deficit, urinary/ bowel incontinence, altered sensorium.

Diagnostic Methods

i) **General physical examination** - This includes complete physical examination, assessment of nutritional status and psycho-social assessment.

ii) **Diagnostic tests**

(a) Endoscopy (laryngoscopy, bonchoscopy laparoscopy, colposcopy etc.)

(b) Radiological tests like plain X-ray, ultrasound, CT scan

(c) Hematologic and biochemical tests

(d) Special tests if needed (e.g. bone scan, bone marrow study; in women - PAP smear and mammography)

(e) Cytology (fine needle aspiration cytology, peripheral blood smear)

(f) Biopsy - incisional, excisional

Treatment decisions

i) Surgery

ii) Radiotherapy

iii) Chemotherapy

iv) Palliative care

Treatment decisions are based upon the following factors

1. General physical status and associated comorbid conditions
2. Stage of the cancer
3. Patient's willingness and compliance

At the present, most of the early cancers are curable in more than 70-90% of the cases. For head and neck, breast, cervix, GIT, prostate cancers, surgery and/ or radiation therapy are advocated as a single modality. With this kind of cancer treatment, the patient's quality of life may not be adversely affected by the treatment. In early stage hematologic malignancies, chemotherapeutic practices provide long term cure and survival in more than 70-80% of the patients, but rarely radiotherapy is utilized for these malignancies. For the advanced stage solid tumours, combined modalities of surgery and radiotherapy are preferred. For some of these tumors, chemotherapy is also recommended as an adjuvant therapy.

Both radio-therapeutic as well as chemotherapeutic modes of treatment are effective in malignancies of cardiac, renal as well as CNS origin. The morbidity and mortality can be reduced by use of less toxic drugs in providing good quality of life.

Prevention of Cancer

- Quit smoking
- Stop use of tobacco in any form
- Avoid alcohol consumption
- Avoid exposure to toxic chemicals, UV rays, radiation etc.
- Practice of yoga and meditation
- Consumption of food groups against cancer risk: International Agency for Research on Cancer (IARC) has suggested to increase or maintain following fruits and vegetables intake to improve nutrition for reducing the burden of cancer and other chronic diseases, such as; broccoli, cabbage, cauliflower, sprouts, turnip, radish, ginger, turmeric, mustard, blackberries, raspbarries, strawbarries, grapes, banana. carrot, peanuts, fruits rich in vitamin C, E and folic acid, milk and dairy products and green and black tea[55].
- Life style changes - like healthy eating habits, exercise and practice of *yoga* and meditation

Palliative care in Cancer:

Palliative care in cancer comprises of active care of pain, distressing symptoms (i.e. tiredness, anorexia, feeling of sick, nausea, taste change, sore throat, bowel problems etc.) and other psychological issues (i.e. depression, anxiety, sleep disturbance etc.) and also improving the quality of life (QOL) of an incurable cancer patient**.** *Ayurvedic* drugs can be used as adjuvants or as supportive therapy. The following *Ayurvedic* formulations may be beneficial to prevent/ minimize adverse effects due to the intensity of chemotherapy/ radiotherapy and/ or to improve the quality of life of cancer patients.

1.	*Āmalakī rāsāyana*	*2.*	*Triphalā rasāyana*
3.	Brāhma rāsāyana	4.	Cyavanaprāśa
5.	Agastya harītakī rasāyana	6.	Drākṣāvaleha
7.	Aśvagandhā cūrṇa	8.	Śatāvarī cūrṇa

9.	Avipattikara cūrṇa	10.	Kāñcanāra guggulu
11.	Kaiśora guggulu	12.	Triphalā guggulu
13.	Śilājatvādi vaṭī	14.	Punarnavā maṇḍūra
15.	Śaṅkha vaṭī	16.	Daśamūla kvātha

Recent studies have shown the beneficial effects of following herbs in cancer.

1. *Śarapuṅkhā* (*Tephrosia purpurea* (Linn.) Pers) in oral carcinoma[56]
2. *Rasona* (Garlic - *Allium sativum* Linn.), *Methikā* (Fenugreek - *Trigonella foenum graecum* Linn.) for reducing tumor cell growth
   a. *Soyā* (Glycine max (L.) Merr.) to decrease risk of breast, prostate and colon cancer
   b. *Kāravellaka* (Bitterguard - *Momoridica charantia* Linn.) for inducing apoptosis in Colon cancer cells[57].

2. UTERINE PROLAPSE AND URINE STRESS INCONTINENCE

Genital prolapse is commonly seen in elderly women. In addition, urinary symptoms especially urine stress incontinence is one of the most prevalent conditions in elderly women.

Uterine Prolapse

Descent of cervix into the vagina or outside the introitus along the axis of vaginal lumen is called uterine prolapse. Uterine prolapse is usually associated with variable degrees of vaginal prolapse.

Degree of uterine prolapse

1. **First degree -** Slight descent of uterus, cervix remaining within the vagina below the level of ischial spines.
2. **Second degree** - Cervix protrudes outside the introitus when she is standing or stretching.
3. **Third degree -** Entire uterus prolapse outside introitus with whole vagina or whole of anterior vagina wall and homepart of posterior vaginal wall is everted.

Etiology

1. Estrogen deficiency leads to alteration in collagen in the ligaments and endopelvic fascia - reduces their supportive strength
2. Ageing produces atrophy of tissues and hypotonia of muscles
3. Injuries during child birth
4. Multiple pregnancies
5. Increased intra-abdominal pressure due to chronic cough, constipation, obesity, ascities, intra-abdominal tumors

Clinical features

1. Mass protruding from vagina
2. Feeling of mass in the vagina
3. Pelvic discomfort
4. Low backache on prolonged standing
5. Purulent, blood strained discharge
6. Frequency of micturation
7. Stress incontinence
8. Vaginal flatus

Management

In complete prolapse, surgery is the last option but early stage (in first degree uterine prolapse) can be managed through *Ayurvedic* medical management.

Prevention

1. Use of *rasona (Allium sativum* Linn.*), pippalī (Piper longum* Linn.), *harītakī (Terminalia chebula* Linn.*), āmalakī (Phyllanthus emblica* Gartn.*), yava* (*Hordeum vulgare* Linn.), *madhu* (honey), *māṃsa rasa* (meat soup), milk, *ghṛta, āsava, ariṣṭa* etc.
2. Child birth trauma should be avoided; it occurs should be managed properly
3. Prolonged second stage of labour is avoided by timely episiotomy or forceps delivery

4. Post natal exercises are to be done to strengthen pelvic floor
5. Squatting and straining are to be avoided

Drug therapy

1. *Snehana* and *svedana*
2. *Vasti*: *Anuvāsana vasti* with 50 ml *Sukumara taila/ Bala taila / Śirīṣa taila* for 7 days and *Palāśādi niṛūha vasti* as *Kālavasti krama*
3. Application of *Picu* soaked in *Mūṣika taila*
4. *Puṣyānuga cūrṇa* 3 gm twice daily for 30 days
5. *Phala ghṛta / Triphalādi ghṛta* 10 gm twice daily for 30 days
6. *Nyagrodhādi kaṣāya* 15-30 ml twice daily for 30 days
7. *Mahārāsnādi kvātha* 15-30 ml twice daily for 30 days

Stress incontinence

Stress incontinence is a condition where urine leaks with rise in intra-abdominal pressure in the absence of detrusor activity. Exact incidence of this problem is not known but it is reported to be 25-30% in the elderly women attending gynaecoligical out patient department[58].

Aetiology

1. Vaginal injury during child birth
2. Ageing leads to loss of muscle tone
3. Estrogen deficiency leads to alteration in collagen in the ligaments
4. Intra abdominal pressure increasing factors like obesity, chronic cough, constipation and heavy weight lifting etc.

Medical management

Prevention

1. Use of *kadalī (Musa paradisiaca* Linn.), *āmalakī (Phyllanthus emblica* Gartn*)*, *māṣa (Phaseolus mungo* Linn.*), kūṣmāṇḍa (Benincasa hispida* (Thunb.) cogn.*), kharjūra*

(Phoenix sylvestris Roxb.), *vidārīkanda (Pueraria tuberosum* DC.) etc.

2. Weight reduction (in obese)
3. Pelvic floor exercise
4. Institutional delivery or by trained health care provider

Drugs

1. *Āmalakī svarasa* 10 ml with honey and sugar twice daily for 15 days
2. *Nāgakeśara cūrṇa* 2-3 gm with butter milk twice daily for 15 days
3. *Vaṅgeśvara rasa* 250mg with *Triphalā kvātha*