

### **3. PRINCIPLES OF GERIATRIC SURGERY**

The principles of General Surgery are the foundation on which the aims of geriatric care have been incorporated to form the geriatric surgical principles. The general principles of patient care remain the same for all disciplines, but there are certain areas, which are specific and elaborated in each discipline. Ageing often brings multiple physical, psychological, family and financial problems due to various reasons.

#### **Goals**

The three important goals in the geriatric surgical management are to

- Maintain and maximize lifespan and independent function
- Reduce disabilities, suffering and pain
- Enhance quality and dignity of life

#### **General surgical principles**

- ◆ A complete history of the illness
- ◆ Thorough physical examination
- ◆ Investigations to arrive at the correct diagnosis
- ◆ Good preoperative assessment and preparation
- ◆ The right choice and smooth conduct of anaesthesia
- ◆ Optimal surgery and good surgical technique
- ◆ Intensive postoperative care

#### **Aims of Geriatric Care**

Generally, elderly have a different perception of life and death. They tend to be more anxious about disabilities, as it may lead to loss of independence and a precursor of death. They do not want to be a burden to themselves or to the family or society. The central theme of geriatric care is “Care rather than Cure”.

Geriatric care aims at achieving

- Maximum functional capacity
- Independence and comfort
- Minimum caregiver stress

#### **Best forms of health care**

- ◆ Listening to their statements
- ◆ Respecting them at all times
- ◆ Providing regular medical examination

- ◆ Screening for common diseases
- ◆ Implementing preventive measures
- ◆ Executing health promotional activities

**Geriatric care principles**

- ❖ To improve the quality of life is more important than prolonging life
- ❖ To honour the patient’s wishes while investigating and treating
- ❖ To improve the general condition and nutritional status
- ❖ To identify co morbid conditions and correct them before surgery
- ❖ To explain the procedure, possible risks and complications of the proposed surgery
- ❖ To get detailed informed consent in writing for all procedures
- ❖ To initiate the treatment early
- ❖ To consider alternative modalities of treatment instead of high-risk surgery
- ❖ To modify the treatment regimen considering the ageing physiology
- ❖ To take up proactive measures so as to prevent any iatrogenic complications
- ❖ To assess the capabilities of the patient and the family or caregivers as it is essential to make a good and safe management plan
- ❖ To provide continued, comprehensive, interdisciplinary team care

**Table 2: Differences between general and geriatric surgical principles**

<b>General Surgery</b>	<b>Geriatric Surgery</b>
Aim: to cure the disease	Aim: to cure if possible /take care always
Investigation & diagnosis is important	Investigations as per the wishes and convenience of elders
Curative / extensive surgery	Curative/ palliative surgery
Preserve life at any cost	Preserve functional capacity

**Geriatric Surgical Assessment**

A comprehensive multidimensional geriatric assessment is the first step in treating the geriatric patients. It is important to examine physiological, mental and emotional functions as well as socioeconomic and environmental factors. A systematic evaluation of the patient’s ability to perform the tasks associated with independent living should be done and recorded for problem detection and treatment.

**History taking in elders**

- Spend time in getting a good history from the patient, the family members and/ or the care giver in a comfortable surrounding. If needed, ask leading questions to get the proper history

- Elicit past history (go through the previous medical records), treatment history, personal history and family history
- Record patient's attitude and treatment preferences, availability of family and financial support
- Enquire thoroughly complete medication history, poly pharmacy, over the counter drugs and alternative medicines
- Consult referring physician for more details, if required
- Sometimes the history may not be forthcoming and the surgeon has to rely on the history given by the caregivers, physical examination and investigations

### **Physical examination**

Provide a comfortable environment for the elderly and carry out complete clinical examination under good lighting. Sometimes it is necessary to postpone the examination according to the patient's wishes. Examine the following and record the findings.

- General examination for the presence of anemia, cyanosis, jaundice, lymphadenopathy, edema, nutritional disorder, decubitus, colour of skin, hydration, oral cavity (for hygiene, dryness, glossitis, presence of teeth or dentures) etc.,
- Systemic examination for CNS, CVS, RS, and abdomen
- Local examination for mass lesion, ulceration and malignancy. Detailed inspection, palpation, percussion and auscultation should be done.  
(Details are provided in next chapter)

### **Investigations**

#### ❖ Basic investigations

Biochemical	-	blood urea and sugar; serum creatinine and lipid profile
Clinico pathological	-	complete urine analysis and blood count
Radiological	-	X-Ray chest PA view and ultra sonogram abdomen
Cardiological	-	ECG

- ❖ Special tests to be carried out, if any abnormality is suspected
- ❖ Routine and repeated investigation should be avoided
- ❖ Costly and invasive investigations for diagnosis need not be done in the case of very old and very ill patients, if no treatment is contemplated

### **Diagnosis**

- ❖ All efforts should be taken to arrive at the clinical diagnosis and confirmed by investigations
- ❖ Multiple pathological problems with multiple symptoms are common in elders and no single diagnosis is possible for all symptoms
- ❖ Sometimes it may not be possible to arrive at a diagnosis due to patients illhealth and unwillingness or it may not be necessary if the patient is terminally ill. In such cases the general measures are taken to keep the geriatric patient comfortable and free from pain.

## Treatment

- Always aim for complete cure of the disease
- The geriatric patient has many modalities of treatment and surgical option is one among them.
- Alternatives to high-risk surgery and non-operative treatments should also be explained, if and when the surgery is contemplated.
- Consider the general condition and co-morbidities, diagnosis, natural course of the disease, complications and prognosis.
- Always consider the benefit of surgery against the possible risks, complications and problems
- Some times cure may not be possible due to various reasons, in such situations palliative and supportive measures should be undertaken
  - ◆ To relieve symptoms like dyspnoea, dysphagia and pain
  - ◆ To ameliorate the ill effects of foul smelling discharge, fungating ulceration
  - ◆ To provide enteric route for nutrition
- Always provide general supportive measures and care

### Key points

- ☞ The surgeon, while deciding on hospitalisation, ordering costly and troublesome investigations, initiating intensive and invasive monitoring and treatment should always get signed consent from the patients / patients relatives.
- ☞ A good communication with the patients, family members, the caregivers, and the family physicians will help to get the expressed preferences.
- ☞ The surgeon should judiciously manage the elders without pushing them to financial difficulties
- ☞ Medical ethics, moral values and legal formalities should be followed strictly while taking management decisions
- ☞ Reassurance and tender loving care should be given life long