Management of Geriatric Patients
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Introduction
“And so from hour to hour, we ripe anci ripe,
And then, from hour to hour we rot and rot,
And there by hangs a tale.”
---------William Shakespeare

Can we reverse the content of Shakespear's poem? There are inevitable degenerative changes in almost every organ system of human body with advanced age. Molecular biology has improved so much that scientists are thinking of producing human being from clone technology. Will we be able to stop the aging process so that there will be no natural death and people will remain ever young? The nature will run in its own way. Now we are able to prevent and cure many killing diseases except vandalism of aging. So the number of fair old will increase tremendously in near future.

Geriatric medicine, the medicine of old age encompasses much of the knowledge and clinical skills of organ based speculation & applies these to a particularly complex group, the frail elderly of the age over 75. The old man or woman may not be aware of actual illness making him or her moribund due to altered sensation or atypical sign and symptoms. The relatives around may think that these symptoms or illness behaviour might be normal for this age group. Older are also particularly prone to adverse drug reaction because of age related changes in response to drugs and their elimination.

Demography
There is sharp decline in the morbidity and mortality of global population and average life expectancy has been increased in the recent past due to improved health care facilities. Population projection suggest that these demographic changes will continue over the next 20 years in under developed and rapidly developing countries. These will have major impact on health and social services, as there is still exponential increase in disability and in mental and physical morbidity in people aged over 75 years.

Normal aging
We should have an appropriate baseline against which symptoms and signs in the elderly people can be assessed. So it is difficult to define normal aging. An important feature of aging is the increase in variation in function.

So that a particular feature may appear to undergo a moderate decline with age, it may remain unchanged in some older people but be so everly impaired in others that it causes serious problems. Under baseline conditions the effect of aging may not be sufficient to produce diseases but may reduce the reserve capacity of body functions, so that minor stress or illness may precipitate a problem. Some features of aging are age determined such as depigmentation of hair and some are age related such as lack of exercise or poor diet, or are accelerated by habits such as smoking, taking heavy alcohol or over exposure to sun light. Age related changes can therefore be slowed or prevented by healthy life style.

Major manifestations of disease of old people
The old people present with falls, acute confusion and incontinence rather than more specific signs symptoms in a wide variety of illness as diverse as acute myocardial infarction, pneumonia, urinary infections, anemia, etc. This is one of the fundamental elements of geriatric medicine. This is not always easy to explain the reason but may reflect the aging, poor nutrition and presence of multiple pathology.

The four major areas are
A. Falls and poor mobility

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The principal cause of fracture neck of femur in old age group is fall. Only 1-0-1.5% of falls result in serious injury. Osteoporotic necks are more vulnerable to crack than others. Other cause of pain and restricted mobility are osteoarthritis of weight bearing joints and wasting of attaching muscles. Vertebral osteoporosis, multiple myeloma and secondary deposits in the vertebral bone from prostate, ovary, breast etc. make the vertebrae trail and collapse. Osteoporosis is common in old older than 75. But post menopausal osteoporosis is more common and need to be considered while counting collapse vertebrae and fracture neck of femur.

Treatment and Prevention of falls
Treatment of falls requires the identification of cause. Supportive and specific treatment if available should be given; Cardiac causes of syncope should be thoroughly investigated. Recurrent falls can be prevented by giving attention to some of the risk factors such as polypharmacy postural hypotension, poor balance and strength. Medication can be rationalized and this may help reduce postural hypotension. For control of Parkinson’s disease and osteoarthritis, balance training by physiotherapy in conjunction with medication is particularly important. Poor mobility can be improved with appropriate intervention. Safe environment for mobile old should be ensured. This is best assessed by occupational therapist. Mobility aid and personal alarms can be provided.

B. Acute confusional state
Acute confusional states cause a global impairment in mental function with varying degree of impaired conscious level and memory disturbances.

Management
Management is essentially that of underlying cause. A full examination is required particularly for signs of infection or focal neurological abnormalities. Supportive measure such as fluid and electrolyte balance must be provided before elaborate investigation or specific treatment is made.

C. Urinary incontinence
Urinary incontinence is defined as involuntary loss of urine sufficiently severe to cause a social or hygiene problem. Three categories for persistent incontinence are: stress incontinene, urge incontinence and overflow inontinence.

Stress incontinence
This occurs when abdominal pressure rises e.g. during coughing, laughing or carrying heavy weight. Continence can be improved by pelvic floor exercise. In severe cases surgical intervention is necessary.
Review Article

Urge incontinence

Patients with urge incontinence are unable to inhibit leakage of urine when they fill the urge to micturate. In motivated patients, symptoms can be improved by bladder retraining in some cases.

Retention and overflow incontinence

Overflow incontinence occurs when urinary retention progresses to the point at which the bladder can no longer expand and the pressure within the bladder exceeds outlet pressure. It may be caused by outlet obstruction or abnormalities of neurological control. Treatment of outlet obstruction is surgical. For neurological cases, bladder retraining is the best long-term management.

D. Dizziness

Dizziness is very common presenting symptom in the elderly, affecting at least 30% of those aged over 65 in community surveys. It is an excellent example of the importance of a problem-based rather than an organ-based approach in old age, as it can be caused by disease in many find it difficult to describe the sensation they experience. Light headedness suggest presyncope, vertigo with tinnitus and hearing loss suggest vestibulocochlear pathology, unsteadiness on head and neck movement suggests cervical spondylitis. Postural hypotension are commonly due to anti-hypertensive and diuretics. Cerebrovascular diseases and hypertensive encephalopathies are other causes of dizziness.

Rehabilitation of geriatric patients

The basic tool of rehabilitation of the elderly is a team of medical, nursing, and paramedical personnel, each with a special role. The coordination of the activities of the group usually falls to the doctor, though he may well not be the most important member of the team at particular time during the rehabilitation of a particular patient. Nurses have a central place because they spend much time with the patient. The functions of the paramedical member of the team (physiotherapist, occupational therapist, speech therapist, and social worker) are the assessment of the patient’s disability in terms of their own discipline, treatment by appropriate techniques and the counselling of patients and their relatives. The physiotherapists’ principal concern is mobility; the occupational therapists’ are for the activities of daily living, the provision of aids and the adaptation of the home environment to the patients’ disabilities. The social worker is concerned with the social and family problems presented by illness and disability. The objectives of rehabilitations programme for an individual rest on a detailed assessment of the patients’ current disability in terms of functions. Each patient needs an individual rehabilitation programme, and each of the team must know what is expected. The programme must be flexible & take into account the unforeseen. Common problem in geriatric hospital practices are stroke, Parkinson’s disease, arthritis of weights bearing joints, dementia and psychological problem. The process of assessment should be ongoing and reviewed regularly amongst all member of the rehabilitation team, and with the patients and his or her career, so that any changes in the treatment programme can be agreed. The emphasis required will be different depending on patient’s disabilities.
Conclusion

45 percent of those persons over the age 65 have some limitations to perform activities of daily life and of those over 85 years, 60 percent show such limitations. Rehabilitation medicine seeks to reduce these limitations by improving the functional capacity of the elderly disabled persons. Based on this principle rehabilitation in the elderly population should emphasize prevention through training to preserve unimpaired function and to restore those function that are impaired. Geriatric patients are likely to have multiple problems that make rehabilitation in these cases more difficult. Emphasis should be given to instrumental activities of daily living so that they can remain more independent in the society. Comprehensive assessment followed by co-ordinated management and use of the members of the rehabilitation team as necessary results in the restoration and preservation of high quality of life for geriatric patients.

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