Collection of Recorded Radiotherapy Seminars

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THE OLDER PATIENT

Issues and management in the radiotherapy department

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The aging population: life expectancy

There has been a dramatic increase in life expectancy over the centuries.

There are over 32 million people aged 65 and older in the US.
The aging population

• 25% of the population of Europe is over 70 years of age

• Over the next several decades the percentage of the population over 65 years will double
The aging population

• Aging is not a disease and being old does not mean being infirm or incapable

• The older patients need to be viewed in a more focused and individual way
Defining age

- Chronological age
- Physical age

- Physiological or Biological age
  - Estimate of how strong or frail an individual is
  - Any co-existing co-morbidity
  - Their ability to tolerate treatment
The normal process of aging

• Distinguished by four criteria
  – Must be deleterious to the organism – reducing function
  – Must be progressive gradually occurring over time
  – Intrinsic and unrelated to modifiable environmental factors
  – Universal, occurring in all members of the species

(Strehler 1982)
Examples of functional decline associated with aging

- Kidney function
- Bone marrow stem cells
  - fewer
  - proliferative potential of progenitor cells is reduced
- Decline in immune function
Functional decline associated with aging

Under normal conditions these changes / declines are not associated with disease / symptoms of disease

- Aging is not a disease process but the changes that come with aging may make an individual susceptible to disease

(William Bershler et al, Cancer 1997 P 1284)
Aging and cancer

• By the year 2020 it is anticipated that the global population will have increased by 12% but the total cancer incidence is expected to rise by 60%
Aging and cancer

• By the year 2020 it is anticipated that the global population will have increased by 12% but the total cancer incidence is expected to rise by 60%

• In the coming decades the number of cancers in those aged over 75 will rise by 18% and in those aged over 85 by 60%

(Kennedy B.J. et al Cancer 1994 73:724-9)
Stage at diagnosis in the older person

• Older patients tend to present with later stage disease
• This is associated with a poorer prognosis overall
• Many reasons have been cited for the later diagnosis in older patients
Stage at diagnosis in the older person

- Lack of cancer knowledge in the elderly population
- Failure to recognise signs and symptoms
- Fatalism
- Cancer phobia
- Fear of treatment
- Physician attitude
- Poor social support
- Limited access to transport
The older person in the radiotherapy department

• Factors to consider:
  – Stage of disease
  – Co-morbidities
  – Functional and physical changes
  – Social and economic factors

• and how these impact on the management of the older person in our care
Functional / Physical change

- Skin becomes
  - Less elastic
  - Drier
  - More wrinkled
- Nails grow more slowly
- Hair thins and becomes greyer
- Vision and hearing become less keen
- Sense of taste, touch and smell become less acute
Functional / Physical change

- **Muscles diminish**
  - Strength
  - Size
  - Reflex speed

- **Bones have**
  - Less mass and density
  - Break more easily
  - Heal more slowly
Functional / Physical change

- Digestive disturbance occurs more frequently
- Fat accumulates more readily
- Hormone production alters
- Voice changes
- Energy is diminished
- Reproductive capacity ceases
- Intellectual function however is probably more a produce of the environment than age
Functional / Physical change, effect and management

• Cartilage degenerates, causing smaller range of movement
  – Less flexibility causing possible positional difficulty

• Collagen and elastic degenerate, causing skin wrinkles
  – Harder to visual skin marks
Visual

• Presbyopia (Loss of near vision) results in the decreased ability of the lens to accommodate changes in visual distance
• The elderly are more sensitive to glare, less sensitive to colour
• Often have difficulty with depth perception
Functional / Physical change, effect and management

Visual

• Affects communication by interfering with the ability to read, to see screens and monitors and to distinguish facial expressions and other body language
Functional / Physical change, effect and management

Auditory

• Presbycusis (the general reduction in the ability to hear that occurs during the aging process)

• Older people tend to experience a reduction in sensitivity to high pitched sounds such as
  sh  s  t  ch  v  f
Functional / Physical change, effect and management

Auditory

- Increase in sensitivity to loud noises
- Increase in difficulty localising sounds
- Difficulty in distinguishing background noise from foreground noise
Functional / Physical change, effect and management

Skin Changes

• Skin becomes thin, fragile, easily broken
• Decreased response to pain
• Increased pain threshold
  – Great care with moving and position
  – Monitor skin daily to check for reactions
Functional / Physical change, effect and management

Balance and Co-ordination

- Increasing weakness
- Loss of flexibility
- Dizziness and vertigo
- Decrease in proprioception
- Change in centre of gravity
- Increased fear of personal injury
Functional / Physical change, effect and management

Co-morbidity

- Older patients are more likely to have other diseases giving a range of limitations
  - Cardiac or respiratory
  - Arthritis
  - Gastrointestinal or genitourinary
Functional / Physical change, effect and management

- Nutritional intake
  - The older patient is more vulnerable to inadequate nutritional intake
    - Other co-morbidities
    - Financial
    - functional
Social and economical factors of the older cancer patient

• A significant percentage of the over 65s live alone
• The extended family is a diminishing concept - smaller family units are now more the norm
• Families are often now widely dispersed
• Larger percentage of women in the workforce - 82% of carers are women
Social and economical factors of the older cancer patient

• There may be financial implications
  – Difficulties associated with the high cost of hospitalisation or nursing home care
  – Practical issues in the home
  – transport
• Elderly people are more independent and loss of personal control may lead to depression
• Impaired communication in the face of serious illness can be even more isolating for the elderly
Social and economical factors of the older cancer patient

- Decreasing ability of the elderly partner to fill the caring role
  - Because of the increasing incidence with age there is a real possibility of both partners suffering from a cancer simultaneously, or a carer may neglect their own symptoms out of concern for their partner
The future

Well older patient  Frail older patient

Increasing need for adaptation of the approach to management of the older person reflecting the individual changes of aging
The future

- An increasing older population is a reality
- Analyse the resource requirement to meet this increase
- Assess the older patient carefully prior to treatment
- Make their experience in our departments a positive one