SIOG Radiotherapy Task force

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Geriatric assessment

- Comprehensive geriatric assessment adds substantial info on functional status

- Quickly administered tools:
  - Groningen Frailty Index
  - Vulnerable Elders Survey
  - Timed ‘up and go’
An 81-year-old patient with stage Ib non-small-cell lung cancer treated with stereotactic body radiotherapy (SBRT).

Kunkler I H et al. Ann Oncol 2014;annonc.mdu104
SIOG recommendations: breast RT

- Postoperative radiotherapy remains standard of care following breast conserving surgery
- Shorter (hypofractionated) radiotherapy dose fractionation schedules attractive alternative to standard 50 Gy in 25#
- Partial breast irradiation, pending longer term follow up, not advised outside clinical trials
SIOG recommendations: breast RT

• In older patient receiving WBRT, axillary RT recommended if **macromets** in sentinel node or axillary node sampling
• Role of RT in **micromets** uncertain (AMAROS trial)
SIOG RECOMMENDATIONS – LUNG CANCER

- While surgery remains the standard of care in early-stage NSCLC in the elderly, **SBRT** should be considered when surgery is contraindicated.

- For inoperable loco-regionally advanced NSCLC, **concomitant chemoradiation** is appropriate in fit elderly patients.

- For operable loco-regionally advanced NSCLC, no elderly-specific recommendations can be made concerning post-operative indications, where decisions should be individualised.

- In limited-disease SCLC, **chemoradiation** in the fit elderly is appropriate, with adapted regimens where necessary.
SIOG recommendations: lymphoma

- For early stage HD involved field radiotherapy (IFRT) after short course chemotherapy
- More advanced HD and stage 1-2 NHL IFRT is indicated for symptomatic recurrences and all low grade lymphomas
**SIOG RECOMMENDATIONS – PROSTATE CANCER**

**Patients with low-risk PC**
- Decisions of hormone therapy, watchful waiting, EBRT, BCT or surgery based on CGA
- Significant comorbidity a strong relative contraindication to aggressive treatment.

**Patients with intermediate or high-risk PC**
- sig OS benefit from short 6 mos course ADT + EBRT (without mod/severe comorbidity)
- For high-risk PC, CMT with EBRT and long-term ADT selection on CGA and treatment tolerance.

**EBRT technique in elderly**
- 3D-EBRT for all
- IMRT is generally associated with less grade 3 proctitis vs 3D-EBRT
- hypofractionated RT ? more convenient alternative
SIOG Recommendations: Endometrial cancer (EC)

- **Vaginal brachytherapy** adjuvant treatment of choice for high-intermediate risk EC based on efficacy, reduced toxicity and improved quality of life when compared to external beam RT (GRADE A)
SIOG recommendations: rectal cancer

- Given increased treatment related mortality, endorectal RT alone attractive in early disease
- For T2/T3 RT management more difficult – favourable outcome with chemo + surveillance/local excision if CR
- Short course (25Gy/5#) alone alternative to CMT
SIOG recommendations: rectal cancer

- Stereotactic body RT (SBRT) option when not candidates for curative resection of lung or liver mets
- 1-5 fractions with high local control rates and minimal toxicity
Head and neck RT recommendations

- Radical RT using IMRT /other highly conformal techniques to reduce acute and late toxicity in absence of severe comorbidities.

- Aggressive combined modality treatment is appropriate where comorbidities permit.
SIOG recommendations: CNS tumours

- Conformal short course RT +/- concomitant temozolomide for malignant glioma

- For limited brain mets, focal RT recommended (similar survival and less neurotoxicity vs whole brain RT)
Response of an isolated brain metastasis from non-small-cell lung cancer two months after single-fraction radiosurgery delivering 20 Gy (courtesy of RP).

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Lung RT: future research

- compare SBRT to surgery (both standard and limited, e.g. wedge resection)
- Concomitant targeted and less toxic agents than platinum in locoregional advanced NSCLC and limited stage SCLC
Prostate RT: future research

- The role of brachytherapy in elderly patients with low-risk PC should be defined in prospective studies accounting for life expectancy and geriatric evaluation.
HEAD & NECK RT: FUTURE RESEARCH

- Refinement of IMRT organ-sparing techniques, comparing novel strategies (e.g. carotid-sparing IMRT) and standard RT

- Define role of cetuximab in concomitant treatment

- Other concomitant targeted therapies with less toxicity than cisplatin-based regimens and potentially better tolerance than cetuximab