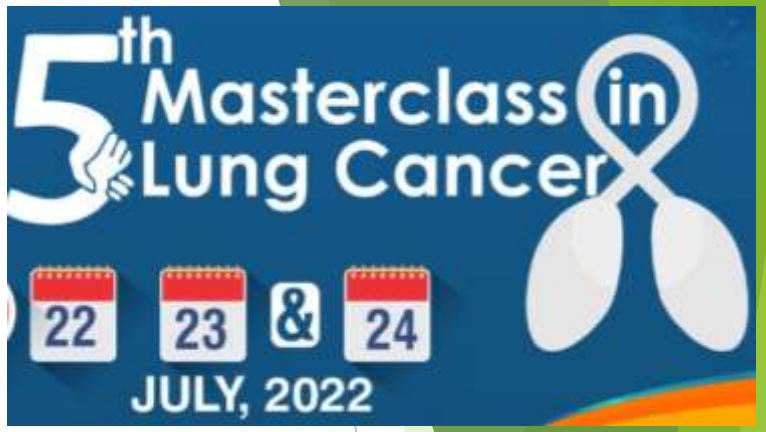


Workshop for geriatrics
Panel Discussion
22nd July 2022

Panel – *Dr Sharada Mailankody (Oncologist), Dr Sridhar Sundaram (Gastroenterologist), Dr Sarika Mahajan (Physiotherapy), Dr Lekhika Sonkusare (Psychologist), Dr Anita Kumar (Geriatrician), Mr Ratan Dhekle(Social worker), Dr Akhil Kapoor (Oncologist), Dr Abhijit Rao (Geriatrician), Dr Sharath (Fellow, Oncotherapeutics)*
Moderator – *Dr Anant Ramaswamy, Dept. of Medical Oncology, TMH, Mumbai*

Case 1

63 year old gentleman, smoker (10 pack years), with a history of diabetes mellitus, Coronary Artery Disease, lumbar spondylolisthesis and possible asthma has been diagnosed with Stage IV adenocarcinoma of the Lung

Primary – Bilateral lung lesions (largest 4x3 cms)

Metastases - Left sided pleural effusion, L3 – L4 vertebral lytic lesions (asymptomatic)

No actionable mutations – EGFR/ALK/ROS/MET; not feasible for immunotherapy

ECOG PS 1

Hemogram acceptable

Albumin – 3.1

Creatine – 1.3

Other labs acceptable

Patient is being planned for palliative radiotherapy followed by chemotherapy with Pemetrexed plus Carboplatin and zoledronate

Case 1 – Question to medical oncologist(s) & geriatrician

Would you consider the patient as an ‘elderly patient’ with cancer?

1. Yes
2. No

Case 1 – Question to medical oncologist(s)

Would you consider this patient for a comprehensive geriatric assessment ?

1. Will screen as to whether he requires a CGA
2. Yes, will consider him for a CGA
3. No, his age (< 65 years), ECOG PS and labs are adequate for beginning cancer directed therapy without further assessment

Case 1 (Question to medical oncologist)

Assuming you did not have Sunkara the access or the logistic wherewithal to conduct a CGA, what would be the bare minimum you would consider as an extra assessment in a 67 year old being planned for IV doublet chemotherapy ?

Case 1

63/69 year old gentleman, smoker (10 pack years), with a history of diabetes mellitus, Coronary Artery Disease, lumbar spondylolisthesis and possible asthma has been diagnosed with Stage IV adenocarcinoma of the Lung

Additional information on testing and further questioning

- Glycosylated Hb -7.0,reasonable control, PFTs – Mild - mod obstruction and restriction
- CAD – ECG ST-T segment changes, changes of old AWMI; 2 D Echo: EF – 40%, RWMA present, mild MR
- Early neuropathy- loss of reflexes, DTR
- Needs to get up twice at night for urinary frequency
- Some bilateral longstanding knee pain
- Meds - Metformin, Sitagliptin, Glimepiride, Ecosprin, Metoprolol Pantoprazole, Salbutamol and beclomethasone inhalers, Tramadol, Paracetamol, Domperidone, SOS Etoricoxib, Cremaffin

Case 1 – Questions for Pharmacologist & Geriatrician

- Brief description on the importance of getting a complete list of medicines in older patients
- How would you define polypharmacy ?
- PIMS – What scale do you suggest for use in a

1. Busy clinical practice
2. Geriatric clinic

- Modifications suggested for this patient

Case 1 – Questions for Geriatrician

The potentially inappropriate medicine	Number of patients ($n=285$), n (%)	Beers category of PIM	Reasons for potential inappropriateness
Proton-pump inhibitor	93 (33)	PIM in most older adults	Increased risk of *Clostridium difficile* colitis, bone loss, and fractures. Avoid use for longer than 8 weeks
Tramadol	84 (30)	Use with caution	May cause or worsen SIADH or hyponatremia
Chlorpheniramine	32 (11)	PIM in most older adults	Highly anticholinergic. May cause confusion, dry mouth, constipation, and other anticholinergic effects
Non-steroidal anti-inflammatory drug	25 (9)	PIM in most older adults	Risk of gastrointestinal bleeding or peptic ulcer. The risk is decreased but not eliminated by the use of proton-pump inhibitors or misoprostol
Glimepiride	23 (8)	PIM in most older adults	Risk of severe prolonged hypoglycemia
Diuretics	19 (7)	Use with caution	May cause or worsen SIADH or hyponatremia
Short- and intermediate-acting benzodiazepines (alprazolam/ lorazepam/clonazepam)	15 (5)	PIM in most older adults	Increased risk of cognitive impairment, falls, and motor vehicle accidents
Tiotropium/ipratropium	11 (4)	PIMs due to a particular disease or condition or due to drug-drug interaction	Anticholinergic medications, to be avoided in persons with delirium or obstructive urinary symptoms or in persons receiving other medications with anticholinergic properties. May cause further cognitive impairment, sedation, dry mouth, constipation
Opioids	10 (4)	PIMs due to a particular disease or condition or due to drug-drug interaction	Avoid in persons with history of falls or fractures, as they increase the risk of syncope, and may impair psychomotor function, increasing the risk of falls. Avoid in persons who are on benzodiazepines or pregabalin/gabapentin as this may cause severe sedation and respiratory depression
Amitriptyline or nortriptyline	10 (4)	PIM in most older adults	Highly anticholinergic. May cause sedation and orthostatic hypotension
H2 blocker	8 (3)	PIMs in persons with renal dysfunction	May lead to cognitive impairment in persons with GFR <50 cc/min. Dose reduction is recommended
Pregabalin	7 (3)	PIMs in persons with renal dysfunction	May lead to mental status changes in persons with GFR <60 cc/min. Dose reduction is recommended

Case 1 – Questions for Geriatrician

- BEERS criteria
- STOP AND START criteria
- PRISCUS
- FORTA
- EU 7

Case 1 – Question for Medical Oncologist and geriatrician

Some more information!

- Weight - 48 kgs
- **Creatinine clearance - 44**
- Height - 158 cms
- BSA 1.45
- BMI – 19.2

Case 1 – Question for Medical Oncologist

The creatinine clearance for our patient is about 40-45 ml/min with a creatinine level of 1.3mg%.
How comfortable are you with this assessment ?

- I would be comfortable with this assessment for treating my patients with chemotherapy
- I would consider a DTPA GFR scan if available
- Calculate GFR via the aMDRD method

Case 1 – Question for Medical Oncologist

The importance of renal status

4684 patients

7.2% had serum creatinine levels >110 µmol/L(1.24 mg%).

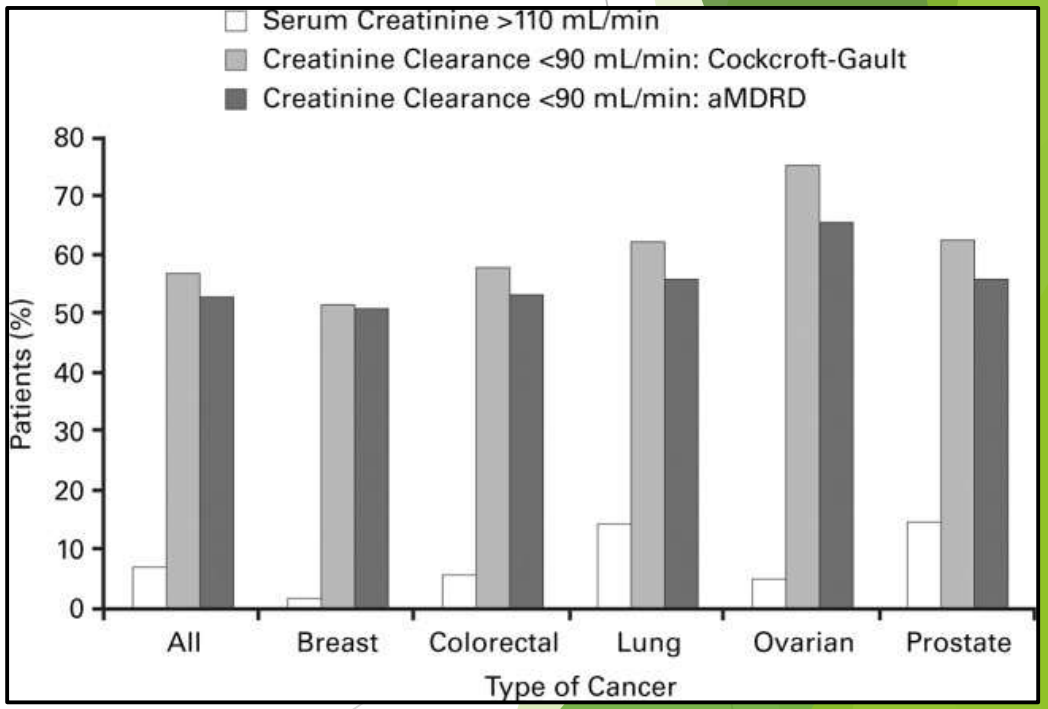
Cockcroft-Gault - 57.4% had RI

aMDRD - 52.9% had RI

53.4% of prescriptions required dose adjustments for RI.

79.9% received at least 1 such drug requiring adjustment

80.1% received potentially nephrotoxic drugs.



Cancer. 2007 Sep 15;110(6):1376-84. doi: 10.1002/cncr.22904.

Case 1 – Question regarding nutrition

Some more information!

- Weight - 48 kgs
- Height - 158 cms
- Significant weight loss – 7kgs in the last 4-5 months
- BSA 1.45
- BMI – 19.2
- Mid arm circumference - 20
- Mid calf circumference – 32
- MNA: Screening – 6; Total - 20

Case 1 – Questions for Gastroenterologist

The patient is at risk for malnutrition as he has a score of 20 on the MNA.

- Is the MNA an adequate screening tool ?
- What would you do next for him ?
- What proportion of your elderly patients probably need nutritional optimization via admission and TPN?
- Anything more that oncologists can do to facilitate nutritional optimization in elderly patients with cancer?

Case 1 – Question for Medical Oncologist

Deficits identified in terms of

- Comorbidities which are reasonably controlled, may need modification
- Borderline GFR
- Possibly BPH
- At risk of being malnourished
- Needs modifications of his non-cancer medications

Case 1 – Communication - Question to social worker and Psychologist

What are the problems faced when explaining to patients

- The need for these assessments
- Communication – language problems, literacy issues etc
- How often do you get answers from care-givers as opposed to the patients themselves?
- Relevance of the questionnaires in Indian patients

Case 1 – Communication

A short geriatric assessment tool for the older person with cancer in India- Development and psychometric validation

13 questions, with 35 subparts

100 patients

25 minutes

95% of patients said that they did not face any problem while answering the questions and confirmed that the questions were relevant.

J Geriatr Oncol.2019 Mar;10(2):222-228

Case 1 – Communication

A Hindi version of the MMSE: The development of a cognitive screening instrument for a largely illiterate rural elderly population in India

- 22 questions
- Pilot component followed by validation in 100 patients

Int J Geriatr Psychiatr. 1995;10:367–77

Case 1 – Screening and onward

The patient was sent to the geriatric clinic where he underwent an initial screening, the results of which are

- TRST – 2 (medications, difficulty in walking)
- VES – 2
- G8 – 11
- TUG - 15
- IADL (Lawton) - 7
- ADL (Katz) - 6

Case 1 – Questions for physiotherapist

Questions

- How would you approach this patient viz-a-viz a patient without bone metastases in terms of muscle/LL strengthening programs?
- How often do you require patients to follow up with you?
- Are there videos or other AV methods for patients to follow up with when they cannot visit?
- Your thoughts on compliance in the Indian setup

Case 1 – CGA

Further assessment during the CGA

- GAD7 – 11
- GDS – 1
- Caregivers - 5
- Caregiver burden scale - 8

Case 1 – Questions for psychiatrist & geriatrician

Questions

- How would you interpret this patient's psychological profile based on the screening results?
- What further testing or questionnaires would you recommend in this patients ?
- How often do you encounter anxiety, depression and other psychological issues in newly diagnosed cancer patients?
- How often do you consider pharmacological interventions in elderly patients with mod-severe anxiety and a new diagnosis of cancer?
- How often do you encounter clinically significant depression in patients

1. Newly diagnosed
2. On treatment

- Any particular coping strategies that you advice for caregivers ?

Case 1 – Question for Medical Oncologist

Final summation of deficits to be addressed on the CGA

Deficits identified in terms of

- Multiple comorbidities and borderline GFR
- Possibly BPH
- At risk of being malnourished
- Needs modifications of his non-cancer medications
- Anxiety assessment
- Functions and falls

Case 1 – Question for Medical Oncologist(s)

He is being planned for Pemetrexed plus Carboplatin with Zoledronate. Worried about toxicity ?

- Yes, but will dose him at 100% with ongoing optimization as per results of the CGA
- Too many issues in the CGA, will start at reduced doses
- Lets do a CRASH score
- Lets do a CARG score

Case 1 – Question for Medical Oncologist(s)

CRASH

Predictors	Points 0	1	2
Hematologic score[a]			
Diastolic BP	≤72	>72	
IADL	26-29	10-25	
LDH (if ULN 618 U/L; otherwise, 0.74 /L*ULN)	0-459		>459
Chemotox[b]	0-0.44	0.45- 0.57	>0.57
Nonhematologic score[a]			
ECOG PS	0	1-2	3-4
MMS	30		<30
MNA	28-30		<28
Chemotox[b]	0-0.44	0.45-0.57	>0.57

CARG

Age ≥ 72 years old	2
Cancer type (gastrointestinal or genitourinary)	2
Chemotherapy dosing (standard dosing)	2
Number of chemotherapy drugs (polychemotherapy)	2
Hemoglobin (< 11 g/dL in males; < 10 g/dL in females)	3
Creatinine clearance (< 34 mL/min)	3
Hearing (fair or worse)	2
Number of falls in the past 6 months (one or more)	3
Take medications with some help/unable	1
Walking one block, somewhat limited/limited a lot	2
Decreased social activity because of physical/ emotional health problem (limited at least sometimes)	1

Case 1 – Question for Medical Oncologist

The treating oncologist did a CARG and the patient scored 14. He was then started on treatment with 3 weekly

- Pemetrexed @ 75% doses
- Carboplatin- AUC-5
- Zoledronate – 3.5mg

Optimization of other aspects of his cancer and non-cancer related profile were ongoing.

Case 1 – Question for Medical Oncologist(s)

Efficacy of Reduced-Intensity Chemotherapy With Oxaliplatin and Capecitabine on Quality of Life and Cancer Control Among Older and Frail Patients With Advanced Gastroesophageal Cancer - The GO2 Phase 3 Randomized Clinical Trial

Geriatric Assessment-Driven Intervention (GAIN) on Chemotherapy-Related Toxic Effects in Older Adults With Cancer: A Randomized Clinical Trial

Evaluation of geriatric assessment and management on the toxic effects of cancer treatment (GAP70+): a cluster-randomised study

JAMA Oncol. 2021;7(6):869-877.
JAMA Oncol. 2021 Nov 1;7(11):e214158
Lancet. 2021 Nov 20;398(10314):1894-1904.

THANK YOU