Lung Cancer in Older Adults

2 Cases

Dr Christopher Steer
Border Medical Oncology
Albury-Wodonga
Inaugural Chair Geriatric Oncology Interest Group (COSA)

Lung Cancer – Case 1

Mr JN aged 85 years
November 2013
Married, supportive wife
Retired truck driver
Social – in process of selling large family home
Moving into retirement village in centre of town.
Ex smoker – ceased 25 years ago.

Comorbidities
Hypertension - on candesartan
Gout
Mild osteoarthritis -
Operation for diverticular disease in 2001
Performance Status = 1
Lung Cancer – Case 1

Mr JN aged 85 years

Presented with mild haemoptysis and shortness of breath on exertion.

CT scan showed
  – right apical lung lesion
  – Abnormal appearance of pancreatic tail – suspicious for malignancy
Lung Cancer – Case 1

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- right apical lung lesion
- Abnormal appearance of pancreatic tail – suspicious for malignancy

Core Biopsy – TTF-1+ adenocarcinoma
- EGFR WT and ALK negative

Case 1 – Mr JN

TTF-1 + immunohistochemistry

Case 1 – Mr JN

Mr JN – PET Nov 2013
Case 1 – Mr JN

PET scan

Report

Primary site: There is intensely increased uptake in the lesion in the right upper lobe.

Locoregional sites: There is intensely increased uptake in multiple lymph nodes within the thorax. These involve the right hilar region, paracardial, paracostal and paraaortic nodes as well as in multiple lymph nodes in the left hemithorax and in the anterior mediastinal region. Abnormal lymph nodes are also found in both subclavicular regions particularly on the right.

Metastatic sites: Mildly increased uptake in the tail of the pancreas is more likely to represent inflammatory change rather than metastatic disease although this cannot be entirely excluded. Focal activity in the mesocolon and the proximal right humerus are suspicious for osseous malignancy. There is a less definite abnormality in T11 which does not appear to correlate with the vertebral end plate and is considered suspicious in this clinical setting.

Incidental findings: NA

Conclusion

This scan demonstrates very extensive right lung, mediastinal, supraclavicular and left axillary uptake, as well as several sites of osseous uptake consistent with a T4N3M1b lung tumour.

Final diagnosis

Stage IV adenocarcinoma of the lung

– EGFR WT

– ALK mutation negative

Nodal and bone metastases with RUL primary.

For palliative treatment
Mr JN – Treatment
Commenced palliative radiation to lung to control haemoptysis
  • Without concurrent chemotherapy.
Clinical response – haemoptysis resolved.
Systemic chemotherapy was then planned but delayed for social reasons (until he moved house).
Dilemma - what treatment?
  single agent vs doublet chemotherapy? ie platinum or not?

Mr JN – Toxicity prediction
Standard dose, polychemotherapy, No limitation of walking 1 block - CARG score = 6

Mr JN – Toxicity prediction
Dose reduced polychemotherapy, No limitation of walking 1 block – CARG score = 4

Mr JN – Toxicity prediction
Dose-reduced polychemotherapy, A little limitation of walking 1 block – CARG score = 6
Mr JN – Toxicity prediction
Standard dose, polychemotherapy, limited walking 1 block - CARG Risk score = 8

Mr JN – Toxicity prediction
Single agent chemotherapy, standard dose, limited walking 1 block - CARG score = 6

Mr JN – Treatment
CARG tool to predict chemotherapy toxicity.

Mr JN – CT post therapy
Carboplatin / paclitaxel chemotherapy commenced 11th March 2014
Carboplatin (AUC = 5) 4 weekly
Paclitaxel 90mg/m² Day 1, 8, 15 q 4weekly
As per Quoix et al.

Toxicity
Tiredness, fatigue,
Cytopenias – day 15 paclitaxel omitted.
Mr JN – CT post therapy

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<tr>
<th>Treatment</th>
<th>Dates</th>
<th>Status</th>
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<td>CT</td>
<td>11/03/2014</td>
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<td>25/03/2014</td>
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Mr JN – Chemotherapy toxicity – Blood counts

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<th>Drug</th>
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<th>C2 D15</th>
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<td>Monocytes</td>
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Mr JN – Bone scan

Mr JN – CT post therapy
Mr JN –
Ceased combination chemotherapy – June 2014
Asymptomatic currently
Opted not to undertake maintenance pemetrexed,
Next appointment in July 2014

Lung Cancer – Case 2
Mrs HM aged 72 years
First seen in August 2012
Presented with increasing shortness of breath on a background of chronic obstructive airways disease.
Ex smoker – ceased 1990
CXR showed a pleural effusion
Cytology = malignant.
CT scan - no obvious primary seen

Social history
Married, Lives with husband who is in very good health
Supportive daughter lives nearby
Comorbidities
Significant COAD limits exercise tolerance
FEV1 = 0.36 (64% predicted)
Hypercholesterolemia
Mrs HM

Pretreatment CT  August 2012

Summary

Adenocarcinoma – presumed lung primary
Symptomatic pleural effusion

Cytology from pleural fluid – adenocarcinoma
Cell block immunohistochemistry
– TTF-1 +, CEA +, CK7 +, EMA +
– ER -, PR -, calretinin -, CK20 –

Options for therapy included
- Palliative chemotherapy
- VATS pleurodesis
- Referred for consideration of pleurodesis
- Performed on 5th September 2012
- Pleural biopsy
  – confirmed metastatic adenocarcinoma TTF-1 +
Mrs HM

Gemcitabine and carboplatin commenced September 2012
4 cycles completed
Dose reduction of the carboplatin with cycle 4 only.

Given the option of pemetrexed maintenance
Commenced Feb 2013
Well tolerated
1 dose reduction due to cytopenia
Now up to cycle 23.
Assessing patients using the “Rule of Thumb”

Assessing patients using the CGA.
Any Questions?