ESMO Clinical Practice Guidelines

Management of carcinomatous meningitis in a patient with advanced lung adenocarcinoma

Clinical Case Presentation

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CASE VIGNETTE

• 46 year-old male
• January 2012: lung adenocarcinoma, EGFR non evaluable, pT2b pN1 M0
• February 2012: lung + axillary resection followed by cisplatin- vinorelbine X 4 cycles
• August 2015: mediastinal lymph nodes progression: local radiotherapy then carboplatin + paclitaxel
• November 2015: repeated falls leading to a brain MRI

EGFR, epidermal growth factor receptor; MRI, magnetic resonance imaging
A cerebral MRI is performed and is normal.
Q1. How do you complete the evaluation?

1. Clinical follow-up only
2. Brain MRI in 2-3 months
3. Thorax/abdomen CT scan
4. PET
5. Spinal MRI
6. CSF cytology
7. CSF EGFR
8. CSF flow study

(several correct answers)
If the MRI was this one, how do you complete the evaluation?

MRI, magnetic resonance imaging
Q2. How do you complete the evaluation?

1. Thorax/abdomen CT scan
2. PET
3. Spinal MRI
4. CSF cytology
5. CSF EGFR status
6. CSF flow study
7. No more examination

(several correct answers)
59 year-old male
2012: lung adenocarcinoma, EGFR undetermined
2012: lung + axillary resection followed by cisplatin/vinorelbine X4 cycles
August 2015: mediastinal lymph nodes progression, local radiotherapy then carboplatin + paclitaxel
November 2015: repeated falls leading to a brain MRI

**Brain and spinal MRI with diffuse linear contrast enhancement**
Detailed neurological evaluation with mild reduction of visual acuity, left tinnitus, mild gait disorder, mild left lower limb deficits, urinary incontinence
No progression of the extra-CNS disease

Re-assessment of EGFR: exon 19 del
CSF: atypical

CSF, cerebrospinal fluid; CNS, central nervous system; EGFR, epidermal growth factor receptor; MRI, Magnetic resonance imaging
Q3. What now?

1. Whole brain radiotherapy?
2. Systemic pharmacotherapy?
3. Intrathecal pharmacotherapy?
4. 1+2?
5. 1+3?
6. 2+3?
7. 1+2+3?
8. Best supportive care?
   (one preferred option)
59 year-old male
2012 : lung adenocarcinoma, EGFR undetermined
2012 : lung + axillary resection followed by cisplatin- vinorelbine X 4 cycles
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Brain and spinal MRI with diffuse linear contrast enhancement
Detailed neurological evaluation with mild reduction of visual acuity, left tinnitus, mild gait disorder, mild left lower limb deficits, urinary incontinence
No progression of the extra-CNS disease

Re-assessment of EGFR and ALK: no mutation/no translocation
CSF: atypical

ALK, anaplastic lymphoma kinase; CSF, cerebrospinal fluid; CNS, central nervous system; EGFR, epidermal growth factor receptor; MRI, Magnetic resonance imaging
Q4. What now?

1. Whole brain radiotherapy?
2. Systemic pharmacotherapy?
3. Intrathecal pharmacotherapy?
4. 1+2?
5. 1+3?
6. 2+3?
7. 1+2+3?
8. Best supportive care?
   (one preferred option)
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Re-assessment of EGFR: exon 19 del
CSF: positive

ALK, anaplastic lymphoma kinase; CSF, cerebrospinal fluid; CNS, central nervous system; EGFR, epidermal growth factor receptor; MRI, Magnetic resonance imaging
Q5. What now?

1. Whole brain radiotherapy?
2. Systemic pharmacotherapy?
3. Intrathecal pharmacotherapy?
4. 1+2?
5. 1+3?
6. 2+3?
7. 1+2+3?
8. Best supportive care?
   (one preferred option)
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Re-assessment of EGFR and ALK: no mutation/no translocation
CSF: positive

ALK, anaplastic lymphoma kinase; CSF, cerebrospinal fluid; CNS, central nervous system; EGFR, epidermal growth factor receptor; MRI, Magnetic resonance imaging
Q6. What now?

1. Whole brain radiotherapy?
2. Systemic pharmacotherapy?
3. Intrathecal pharmacotherapy?
4. 1+2?
5. 1+3?
6. 2+3?
7. 1+2+3?
8. Best supportive care?
   (one preferred option)
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Re-assessment of EGFR: exon 19 del
CSF: negative

CSF, cerebrospinal fluid; CNS, central nervous system; EGFR, epidermal growth factor receptor; MRI, Magnetic resonance imaging
Q7. What now?

1. Whole brain radiotherapy?
2. Systemic pharmacotherapy?
3. Intrathecal pharmacotherapy?
4. 1+2?
5. 1+3?
6. 2+3?
7. 1+2+3?
8. Best supportive care?
   (one preferred option)
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ALK, anaplastic lymphoma kinase; CSF, cerebrospinal fluid; CNS, central nervous system; EGFR, epidermal growth factor receptor; MRI, Magnetic resonance imaging
Q8. What now?

1. Whole brain radiotherapy?
2. Systemic pharmacotherapy?
3. Intrathecal pharmacotherapy?
4. 1+2?
5. 1+3?
6. 2+3?
7. 1+2+3?
8. Best supportive care?
   (one preferred option)