Renal Cell Cancer

Clinical case study 1 & 2

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Case study 1 - RCC and Lung Metastases
Case study 1: Patient History

- Male, 63 years old
- Mild hypertension (β-blocker) and hypercholesterolemia (simvastatin)
- Otherwise healthy
Case study: 1 Patient History

5/2006 Pain, haematuria
Renal tumour (8.5 cm) on right side, multiple asymptomatic lung metastases (all <2cm)
Elevated lactate dehydrogenase but normal Hb, normal calcium, ECOG PS 0
Case Study 1

Question 1 - Therapy?

- Nephrectomy, no active further treatment
- Nephrectomy followed by sunitinib
- Nephrectomy followed by interferon
- Nephrectomy followed by interferon + bevacizumab
- Surgery followed by chemotherapy
Case study 1: Continued

6/2006  Right nephrectomy
Clear cell RCC
pT3bN0, Fuhrman grade 3,
Multiple lung metastases (1-2 cm; asymptomatic)
ECOG PS: 0
Case study 1: First-line sunitinib treatment was initiated

8/2006  Patient treated with sunitinib 50mg 4wks on/2 wks off (Good PR response)
1/2007  Grade 2 fatigue, Gr. III leukopenia and thrombocytopenia, Gr. II hand-foot syndrome
Case study 1

Question 2 - How to proceed (good response but increasing side effects)?

• Lower sunitinib dose
• Drug holiday = withdraw sunitinib for a period
• Replace sunitinib with sorafenib or IFN+bevacizumab
• Replace sunitinib with mTOR inhibitor
• Replace sunitinib with chemotherapy
Case study 1: Sunitinib was withdrawn

Response maintained 6 months

8/2007  New lung & pleural metastases, re-growth of existing metastases, mediastinal lymph nodes, asymptomatic
Case study 1: Sunitinib was restarted (same dose)

- Good response
- April 2008: PD detected (both growth of metastases and small new pleural effusions)
- Treatment tolerability worse than in 2006 (fatigue, HFS)
- Good performance status, no disease-related symptoms
Case study 1

Question 3 - How to proceed (sunitinib-resistant disease)?

- No active treatment
- mTOR inhibitor
- Sorafenib
- IFN
- Clinical trial
Case study 1: Everolimus therapy was started

- Stable disease for 6 months
- After 6 months of everolimus therapy, growth of metastases & multiple new pleural and bone metastases
- Supportive care with zoledronic acid and radiotherapy
- No new systemic therapy due to increased side effects of the previous treatments and worsening of ECOG PS
- Patient alive in November 2009 (being treated at the palliative care unit)
Case study 2 - Slowly progressing metastatic RCC
Case study 2: Slowly progressing metastatic RCC

- Woman, 63 yrs old
- 1996 left nephrectomy (8 cm node positive Fuhrman gr. II clear cell RCC)
- 1/2002 right adrenal metastasis was resected
  - Same histology
- Further treatment?
Case study 2:

Question 1- Treatment after resection of metastasis?

- Follow-up, no treatment
- "Adjuvant" cytokine
- "Adjuvant" local radiotherapy
- "Adjuvant" chemotherapy
- "Adjuvant" VEGFR TKI
Case study 2: Continued

- IFN-vinblastine 8 months as adjuvant treatment in 2002
- 4/2004 new pleural metastases (several small 1 cm mts), mediastinal lymph node mts (1.3 cm)
- Inoperable, ECOG PS 0
Case study 2

Question 2 - How to proceed with small, asymptomatic metastases?

• Active surveillance, no treatment

• VEGFR TKI

• Cytokine treatment

• Cytokine + bevacizumab

• 2nd line chemotherapy
Case study 2: Continued

- Active surveillance for 1.5 yrs
- Due to asymptomatic PD, IFN+vinblastine was re-initiated on 2/2006. Best response SD.
- 7/2006 single-agent bevacizumab was initiated (q3w) due to PD
- Best bevacizumab response SD
- 10/2007 new bone metastases, radiotherapy 10 x 3 Gy locally and zoledronic acid
Case study 2: Continued

- 11/2007 PD, ECOG PS 1
- Temsirolimus was initiated 11/2007
- 2/2008 pneumonitis
  - Treatment with corticosteroids: Rapid recovery of the symptoms within 2 days
Case study 2

Question 3 - Treatment after temsirolimus-related pneumonitis?

- Active surveillance
- Change to VEGFR TKI
- Temsirolimus dose modification
Case study 2

- Active surveillance
- 4/08 PD (also new mts): Temsirolimus response SD
- 4/08 sunitinib 37.5 mg/day
- 5/08 Gr. III proteinuria, sunitinib temporarily interrupted
- 6/08 retreatment with sunitinib 25 mg/day
- 8/08 PD and ECOG PS 2, also reappearance of Gr. III proteinuria
- Supportive care with zoledronic acid
- 5/2009 ECOG PS 2, PD on bone mts, pleural mts and lymph nodes
- Patient alive in November 2009
THANK YOU!

E-Module released in November 2009