Challenging Cases

With Q&A Panel
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Jeffrey Wieder, MD
Case # 1

• 72 year old healthy male with mild HTN

• Early 2011:
  – Preop bone scan and pelvic CT = no mets
  – Radical prostatectomy
  – Pathology = pT3b NO, R1, Gleason = 4+3
  – 1st postop PSA = 0.63

• Late 2011:
  – Adjuvant XRT
  – Post-XRT PSA = 2.3
  – NaF18 Pet/CT = no metastases
Case # 1

• Placed on Degarelix & PSA declined to <0.1
• In late 2013, PSA gradually rising:
  2/2013  0.1
  5/2013  0.1
  8/2013  0.2
  11/2013 0.2
  2/2014  0.3
• No symptoms from cancer
• Active with ECOG PS = 0
Case # 1 - Questions

• What additional tests should be performed?
• Which treatments for prostate cancer have been shown to prolong overall survival in this scenario?
• What treatment is recommended by the AUA for this patient?
Case # 1 - Answers

• What additional tests should be performed?
  • Serum testosterone to make sure that CRPC is present
  • Additional imaging is unlikely to show mets when PSA <10 and PSADT> 6 months, however, bone scan and pelvic imaging are recommended when CRPC is initially diagnosed.

• Which treatments for prostate cancer have been shown to prolong overall survival in this scenario?
  • None
Case # 1 - Answers

What is the recommended treatment for his patient?

- Observation is recommended
- If the patient is unwilling to undergo observation, then 1st generation antiandrogen or ketoconazole may be offered

- Chemotherapy & Sipuleucel-T should not be offered to these men.
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Jeffrey Wieder, MD
Case # 2

- 76 year old otherwise healthy male
- In Russia 2009:
  - Rapid worsening of voiding symptoms
  - Diffusely nodular prostate exam (cT3)
  - PSA = 63
  - Prostate biopsy = diffuse Gleason 4+4 adenoCA
  - Bone scan = uptake in T8-T10 spine
Case # 2

• In Russia 2009:
  – Bilateral orchiectomy
  – PSA declined to <0.1
Case # 2

• In 2011:
  – PSA began to rise
    – 06/2011  0.1
    – 09/2011  0.2
    – 12/2011  0.3
    – 04/2012  0.3

• Serum testosterone = 18
• Normal serum calcium, LFTs, and alk phos
• Asymptomatic, voiding well, no bone pain
• Still otherwise healthy (ECOG PS = 0)
Case #2 - Questions

- What additional imaging would you do at this point?
- What are the standard (first line) treatment options for this patient?
- If the patient is not a candidate for standard therapy, what are the second line treatment options for this patient?
- What other treatment can be offered when bone metastases are present?
Case # 2 - Answers

• What additional imaging would you do at this point?
  • Additional imaging is unlikely to show mets when PSA <10 and PSADT> 6 months, however, bone scan and pelvic imaging are recommended when CRPC is initially diagnosed.

• What are the standard (first line) treatment options for this patient?
  – Abiraterone + prednisone
  – Sipuleucel-T
  – Docetaxel
If the patient is not a candidate for standard therapy, what are the second line treatment options for this patient?

- 1st generation antiandrogen
- Ketoconazole + steroid
- Observation

What other treatment can be offered when bone metastases are present?

- Vitamin D + Calcium
- Denosumab or zoledronic acid
- Above are used to prevent skeletal related events from prostate cancer
Case # 2 – What Happened to Patient?

• In early 2012:
  – PSA = 0.6
  – Serum testosterone = 18
• Standard therapy not available
• Bicalutamide started
• PSA declined to <0.1 until 2013
• In early 2014, came to US:
  – PSA = 1.1
  – Serum testosterone = 21
  – Asymptomatic, ECOG PS = 0
• Now standard therapy available
• Plan is denosumab, sipuleucel-T, then Abiraterone
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Case Study

- A 53-yr-old white man is very healthy and only has complaints of mild ED.
- He has never had a PSA because the newspaper said it does not work.
- His PSA was 11.3 ng/mL, and on repeat 11.0 ng/ml.
Case Study

• Digital rectal exam was benign.
• Trans rectal prostate biopsy revealed Gleason Gleason 3+3 in 2/12 cores and 4 + 4 in 4/12 cores
• CT of the abdomen and pelvis with and without contrast showed only renal cysts.
• Bone scan reveals a solitary vertebral body metastasis.
• MRI of the spine confirmed the lesion.
Question 1

What initial therapy would you recommend?

1) Observation and periodic scans
2) LHRH analogue
3) Docetaxel chemotherapy
4) Sipuleucel-T
5) None of the above
Case Study

• The patient is diagnosed with asymptomatic metastatic hormone naïve prostate cancer.
• LHRH analogue is started with a 30 day course of bicalutamide.
• 3 months later PSA is < 0.1 ng/ml.
• 3 years later and his PSA begins to rise to 0.5 and then to 1.8.
• He has no major complaints.
Question 2

What would you do next?

1) Observation with periodic PSA testing only
2) Radiate the prostate
3) Check a serum testosterone
4) Resume bicalutamide
5) Do nothing until PSA rises above 10 ng/mL
Case Study

• A morning testosterone is 21 ng/mL.
• 3 months later the PSA continues to rise to 5.3 ng/mL.
• Repeat bone scan shows additional lesions.
• The patient continues to be asymptomatic.
• He now has metastatic castrate resistant prostate cancer (mCRPC).
Question 3

Which of the following are reasonable options?

1) Discontinue LHRH, start docetaxel
2) Sipuleucel-T
3) Abiraterone with prednisone
4) Enzalutamide
5) 2 and 3
Case Study

• The daughter is a nurse practitioner and she recommends to her father that he start sipuleucel – T.
• LHRH analogue is continued.
• PSA continues to rise slowly but the patients feels well.
• Three years later the PSA is 27 (T < 10 ng/dL) and the patient begins to have pain in his lower back requiring narcotics.
Which of the following would not be an option for this man with mCRPC based on current FDA approvals?

1) Enzulatumide
2) Abiraterone
3) Radium 223
4) Docetaxel
Question 5
Abiraterone is started with 5 mg prednisone BID. In patients on abiraterone what parameters should be monitored?

1) Blood pressure
2) Serum potassium
3) Liver function testing
4) All of the above
5) No specific monitoring needed
Radium 223 is approved for the treatment of mCRPC with symptomatic bone metastasis. If this drug was chosen in this patient which of the following statements is incorrect?

1) It should not be used in the presence of visceral metastasis
2) It has been shown to extend survival.
3) It is infused monthly X 6 months
4) Bone marrow suppression is not seen
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Case 2

- 63 year old African American male was previously radiated 7 years earlier for a T1C Gleason 3+3 and a PSA of 7.
- He was lost to follow up and now presents with progressive back pain and weight loss
- PSA is 114
- CT abd/pelvis no visceral disease
- Bone scan findings positive
Case 2

- ADT initiated (LHRH + bicalutamide)
- Initial good pain response, PSA nadir 23,
- 7 months later new pain, PSA 78
- Testosterone 15 ng/dl
- Hgb 9.8, 15 lb weight loss
- CT abd/pelvis no nodes/no visceral disease
- Bone scan more extensive disease
Case 2
You Recommend

A. Docetaxel
B. Abiraterone/prednisone
C. Enzalutamide
D. Radium 223
Case 2

- Abiraterone 1000 mg/day plus prednisone 5 mg bid started
- One week later, back pain resolved
- Six weeks later PSA 21 (nadirs at 5.6)
- Tolerated rx with only minor LE edema
- 7 months following initiation of Abi/pred, PSA 54, patient free of disease-related symptoms
Case 2

You Recommend

A. Discontinue abiraterone, start docetaxel
B. Discontinue abiraterone, start enzalutamide
C. Add enzalutamide to abiraterone
D. Add docetaxel to abiraterone
E. Continue abiraterone
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Patient 5: Postchemo CRPC

- 45 yo man presents with metastatic prostate cancer to bone
  - PSA 450 ng/ml, Gleason 8
- He responds to leuprolide therapy for 2 years
- His PSA nadired at 2 ng/ml but now rises quickly to 25 ng/ml over 3 months
  - Reimaging shows multiple bone, liver and lymph node metastases
- He starts docetaxel chemotherapy to which he responds briefly, but progresses again
Which option do you recommend?

- Abiraterone/prednisone
- Mitoxantrone
- Cabazitaxel
- Radium-223
- Enzalutamide
- Hospice
Patient 5: Postchemo CRPC

- He starts on abiraterone and his PSA responds for 6 months, but then begins to progress with increased bone pain
  - He tolerates treatment well but complains of fatigue
- He is now considering cabazitaxel or radium-223.
Which of the following are relative contraindications to Radium-223

• Liver mets
• Symptomatic bone pain
• Platelet count 120,000
• Prior docetaxel chemotherapy
• Children in the home
Patient 5: Postchemo CRPC

• He begins treatment with cabazitaxel chemotherapy and experiences fatigue
• His PSA declines by 90% and his bone pain improves
• However he develops radiographic progression in his liver only. His PSA remains low.
What would you do now?

- Biopsy the liver lesion
- Continue cabazitaxel alone
- Add enzalutamide to cabazitaxel
- Initiate Hospice
Patient 5: Postchemo CRPC

• Biopsy of the liver lesion demonstrates a neuroendocrine/small cell carcinoma
• He starts carboplatin and etoposide chemotherapy and experiences a 30% improvement in the lesions of the liver
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Patient 6: Postchemo CRPC

- 76 yo man had a long history of metastatic prostate cancer to bone, on LHRH agonist therapy for 7 years
- He progressed 2 years ago and has received prior treatment with abiraterone for 5 months
- He started docetaxel chemotherapy, which he tolerated poorly and to which he did not respond after 2 cycles
- PMH notable for CAD s/p CABG, HTN, CVA x 2, COPD
Patient 6: Postchemo CRPC

- He has a performance status of 3
- Bone scan shows multiple sites of uptake
  – Pain only in his right pelvis
- Blood counts are normal except for mild anemia
What would you do now?

• Refer for Hospice
• Consider trial of enzalutamide
• Consider EBRT to right hip
• Trial of cabazitaxel chemotherapy
Patient 6: Postchemo CRPC

- He undergoes a course of RT to the hip and it relieves his pain
- His performance status improves slightly to 2 as he is able to ambulate
- He states that he would like to “keep fighting”
What would you do now?

- Enzalutamide
- Radium-223
- Cabazitaxel
- Mitoxantrone
- Strontium
Patient 6: Postchemo CRPC

- He undergoes a course of enzalutamide to which his pain and PSA stabilize.
- He tolerates treatment well for 5 months with mild fatigue as his only additional toxicity.