ESMO Clinical Practice Guidelines

Breast Cancer
Case Presentation

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Disclosures

No potential conflicts of interest declared

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Case 1

- 42yo, female, pre-menopausal, left breast nodule biopsy positive ductal carcinoma, staging work-up negative for metastatic disease

➢ **Left tumorectomy and axillary lymph node dissection after sentinel node biopsy** Aug 2010
- Invasive ductal carcinoma; 3.5 cm; Grade 3; LVI positive
- 1/21 LN´s positive
- ER and PR neg; Her 2 + (IHC3+)

➢ **Adjuvant treatments**
- Chemotherapy with TAC x6 (Oct 2010 to Mar 2011)
- Radiation therapy Mar-Apr 2011
- Trastuzumab since May 2011

Relapse

- During 4th month of adjuvant trastuzumab (Oct 2011), patient begins to have fatigue and adbominal pain
- Abdominal ultrasound: multiple liver metastasis involving 70% of the liver
- Blood work-up: ↑AST and ALT 2-3X UNL; ↑CA 15.3 (=60)

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Q 1: Would you perform brain imaging screening, despite the fact the patient is asymptomatic?

1. YES
2. NO
3. Abstain

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Q 2: Which of the following would be your first choice of treatment?

1. Weekly paclitaxel or docetaxel + trastuzumab
2. Vinorelbine + trastuzumab
3. Capecitabine + trastuzumab
4. Capecitabine + lapatinib
5. Trastuzumab + lapatinib
6. Docetaxel + trastuzumab + pertuzumab
7. T-DM1
8. Inclusion in a clinical trial of combination CT + HER-2 dual blockade

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Metastatic disease management

- The patient was started on paclitaxel + trastuzumab + bisphosphonate
- She came to our Center for a second opinion
  - Presented with bone pain especially in lumbar spine
  - Neuropathy grade 2
  - Fatigue
  - Depression

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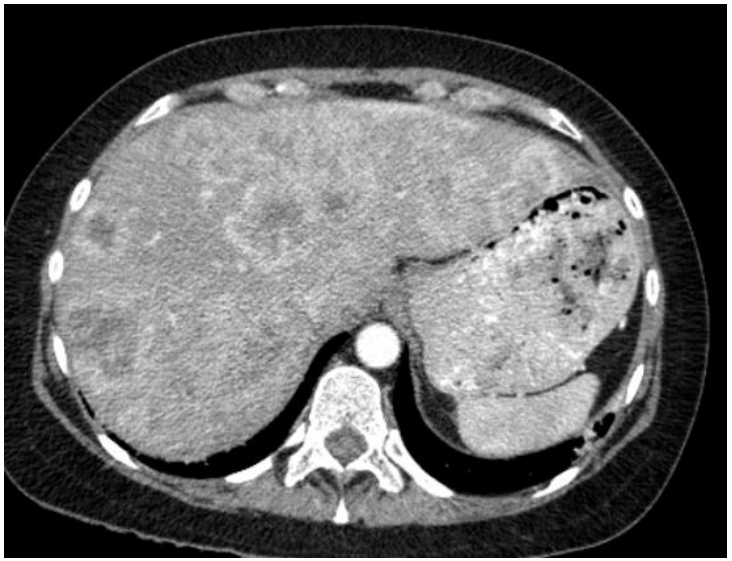
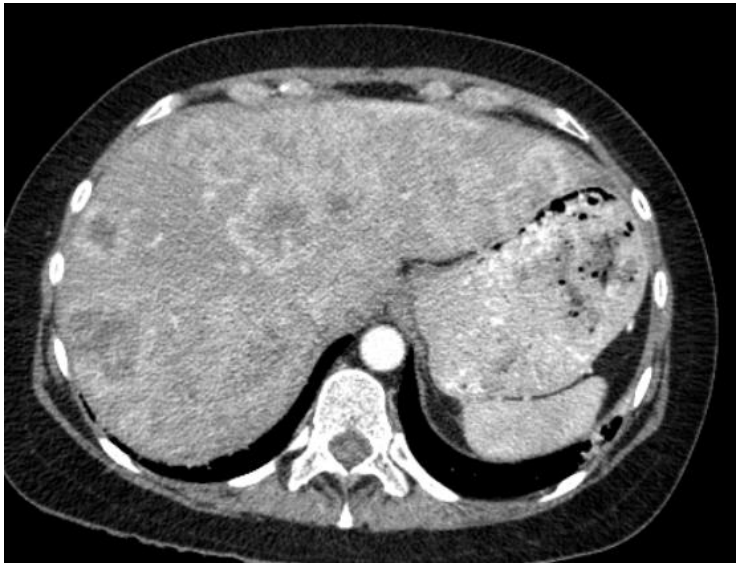
Re-staging in the CCC

- CT-scan abdomen with measurements of target lesions: multiples liver nodes (few mm to 8 cm)





- PET-scan with FDG avid lesions in:
  - Multiple in the liver; bones: right scapula, dorso-lumbar spine, pelvis; mediastinal nodes; brain in the right cerebellum

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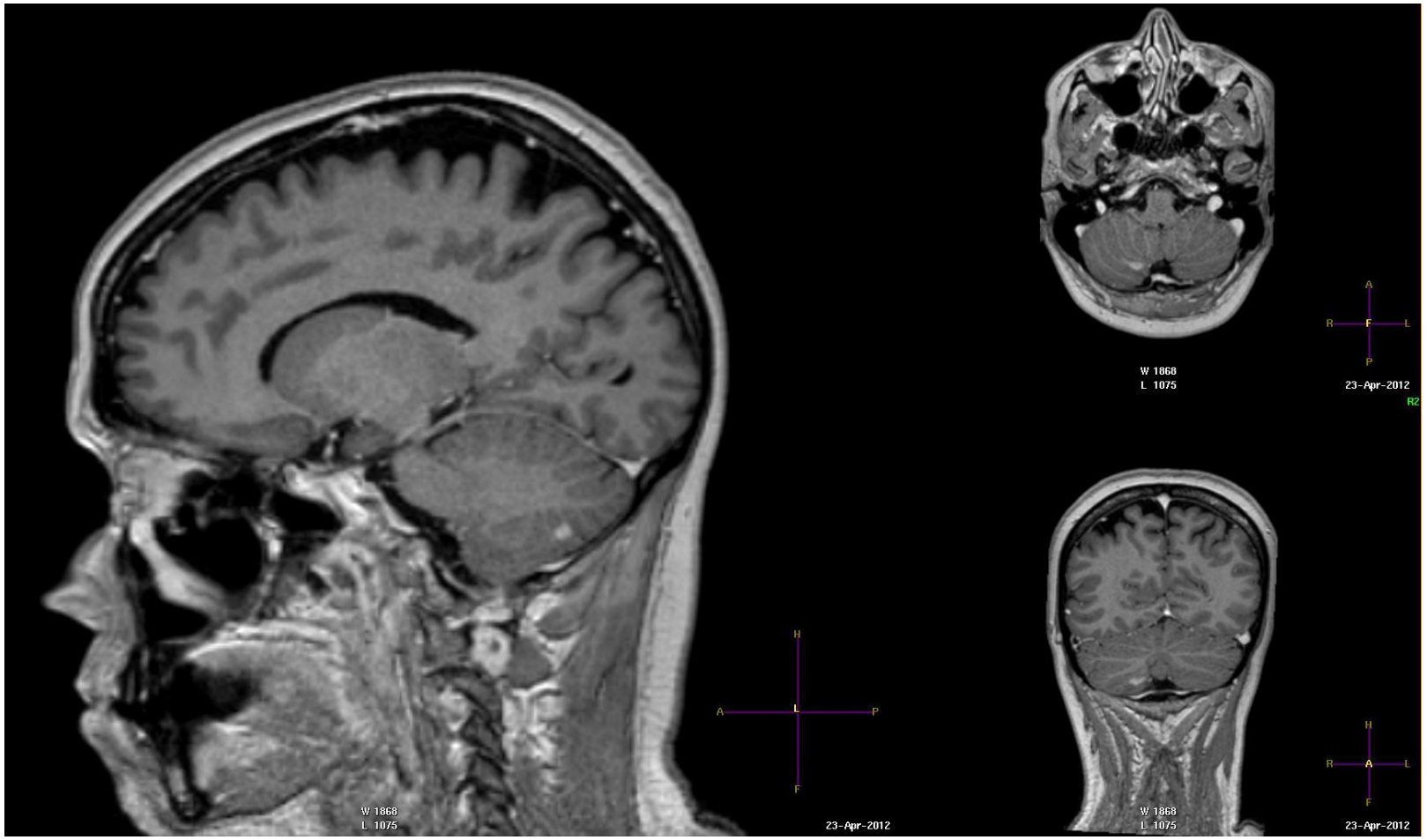
Brain MRI

Lesion in the right cerebellum, 24x17x15.5 mm; small perilesional edema



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Q 3: Which of the following would be your 1st choice of treatment for the treatment of the single brain metastasis?

1. Stereotactic radiosurgery
2. Stereotactic radiosurgery followed by WBRT
3. Neurosurgeon consult, if feasible brain surgery
4. Neurosurgeon consult, if feasible brain surgery followed by radiosurgery/radiation boost
5. Neurosurgeon consult, if feasible brain surgery followed by WBRT
6. WBRT

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Treatment

- Neurosurgeon evaluation: non-operable
- Radiosurgery (stereotactic) to single brain lesion 24 Gy (Nov 2011)
- Single radiation treatment to spine L2-L5 (Nov 2011)
- Since paclitaxel + trastuzumab + bisphosphonate had been started very recently, no change but close re-evaluation
- 3 months later due to worsening of neuropathy, stopped paclitaxel and started capecitabine + trastuzumab

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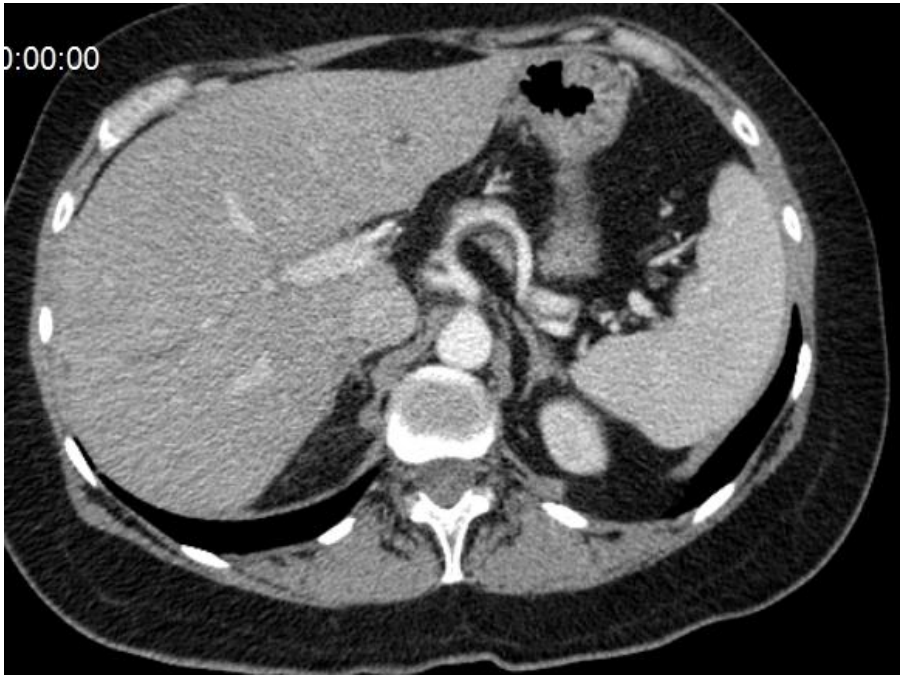
Follow-up

- CT scan July, 2012: Further response in the liver (response 72%)
- Brain MRI April, 2012: almost complete response; no new lesions, no edema
- MRI lumbar spine Feb, 2012: L4-L5, sclerosis and findings of response to therapy
- Blood work June, 2012: AST N, ALT N, CA 15.3=11



- Excellent clinical improvement: no bone pain, neuropathy grade 1, PS: 1, HFS grade 1, much better from depression

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Case 2

- 52 yo, post-menopausal
- Right tumorectomy and axillary lymph node dissection in 2010
  - Invasive ductal carcinoma; 2,8 cm; Grade 3; LVI positive; margins clear
  - 6/16 LN´s positive
  - ER +100%, PR+100%, HER-2 neg
- Adjuvant treatments
  - FEC-D (Epi 100mg.m2; Doc 100mg.m2)x6, till June 2010
  - Tamoxifen since June 2010
  - Radiation therapy (breast wall and lymphatic areas)

Relapse (1 year DFI)

- Aug 2011: Dizziness

- Head CT scan:
  - Three metastatic lesions: 33mm and 7 mm in frontal lobe and 30mm left parieto-occipital lobe, high perilesion edema, mass effect
- Bone scan: no abnormalities
- CT scan thoracic and abdomen: no evidence of metastatic disease
- Blood workup: no abnormalities

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Q 4: Which of the following would be your choice of therapy for the brain metastasis?

1. Stereotactic radiosurgery
2. Stereotactic radiosurgery followed by WBRT
3. Neurosurgeon consult, if feasible brain surgery
4. Neurosurgeon consult, if feasible brain surgery followed by radiosurgery/radiation boost
5. Neurosurgeon consult, if feasible brain surgery followed by WBRT
6. WBRT

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Treatment

- Steroids
- WBRT Aug 2011

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Q 5: Regarding systemic therapy, which of the following would be your preferred choice?

1. Start chemotherapy with capecitabine
2. Start chemotherapy with a taxane
3. Change endocrine therapy to AI
4. Maintain tamoxifen until extracranial progression

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Post-treatment

- Tamoxifen maintained
- Clinically stable but without full recovery from symptoms
- MRI 6 weeks after treatment: reduction of the known lesions
  - 33mm to 30 mm frontal lobe, mostly with a cystic component, similar perilesional edema
  - 7 mm to 4 mm frontal lobe, similar perilesional edema
  - 30 mm to 24 mm parietal- occipital lobe, some reduction in the perilesional edema

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Q 6: At this stage which management would you select?

1. Change systemic treatment
2. Neurosurgeon consult and neurosurgery if feasible
3. Neurosurgeon consult and neurosurgery if feasible followed by stereotactic radiosurgery
4. Stereotactic radiosurgery
5. No change in therapy and follow up with imaging and clinical monitoring

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Treatment Management

- Surgery to the frontal lobe metastasis with cystic component (Jan 2012)
- Radiosurgery (gama-knife) to the resection area plus additional smaller lesions in frontal lobe and temporal and occipital lobe
- Tamoxifen maintained
- Improved symptoms and p.s.

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Brain MRI