Living with Metastatic Breast Cancer

Case 1: SG – 73 years old in 2003
- 4.5 cm mass found in R breast
- Invasive papillary cancer, grade 1, ER+, PR+, HER2-
- Underwent lumpectomy and axillary dissection
- 5/13 axillary LN + for metastatic disease
- Was planning to administer adjuvant chemotherapy
- Asymptomatic, but metastatic w/u revealed pulmonary nodules, hepatic masses and a markedly elevated tumor marker
- No bone metastases

Silent no longer: The medical and emotional issues of living with metastatic breast cancer

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This is session 98
## Living with Metastatic Breast Cancer

### Case 1: SG – 73 years old in 2003
- Started on Anastrozole in 10/2003
- Tumor marker fell, lung and liver masses regressed
- On anastrozole thru 1/2010 when marker rose
- 1/2010-6/2011 Tamoxifen
- 8/2011-1/2012 Exemestane
- 1/2012-1/2014 Megestrol acetate
- 1/2014-  Letrozole

Remains asymptomatic, fully functional (PS 0), age 84

### Case 2: ES – 37 years old in 2011
- Presented with 3 months of lower back pain during pregnancy (terminated when fetus found out to be nonviable)
- Enlarging mass R breast with peau d’orange
- Biopsies showed intermediate grade IDC with necrosis ER 75%/moderate, PR-, HER2-
- Metastatic w/u showed lung masses, thyroid masses (biopsy = metastatic breast cancer)
- Extensive liver mets (with elev bilirubin, AST>5 X ULN)
- Diffuse bone metastases (unable to walk w/o support due to pelvic and hip pain)

#### 6/2011 - Started weekly carboplatin and paclitaxel + denosumab for bones; LFTs and tumor marker improved. Resumed working as HS principal in 9/2011
- 10/2011 – switched to fulvestrant; when estrogen level started to recover, added goserelin
- 5/2012 – c/o numbness on R side of body and brief focal seizures. Found to have diffuse dural metastases and cerebellar edema, but no carcinomatous meningitis. Treated with WBXRT and anticonvulsant. Improved and have not regrown (so far)
Living with Metastatic Breast Cancer

Case 2: ES – 37 years old in 2011
- 8/2012 – Increasing adenopathy; switched to anastrozole
- 10/2013 – Enlarging liver mets, switched to capecitabine, to which she is responding as of 2/2014

So, 2½ years into her ‘journey’, at age 40, she feels well (except occasional mild R hip pain), is working full time, caring for her husband and 7 children. Last summer went camping, hiked 5 miles, went whitewater rafting.

Living with Metastatic Breast Cancer

- <5% of patients diagnosed with invasive breast cancer present with overt metastatic disease, but
- 20-30% of patients will develop metastatic disease, and most of them will die from it
- In the US, mortality from breast cancer has fallen by ~2.2% per year

Living with Metastatic Breast Cancer

Improvement in MBC Survival

3-year Overall Survival
Living with Metastatic Breast Cancer

Why are patients with MBC living longer?
• Identification of clinically relevant subpopulations
  – ER/PR+, HER2+, TNBC
  – ? Role of repeat biopsy at detection of recurrence
• New treatment options
• Improvements in supportive/palliative care
• Improvements in psychosocial support
• Ability to detect low tumor burden (upstaging)

Living with Metastatic Breast Cancer

New Treatment options:
– ER/PR+:
  • Aromatase inhibitors
  • LHRH analogs or oophorectomy (premenopausal)
  • Fulvestrant
  • ? Fulvestrant + AI
  • AI or Tamoxifen + everolimus
  • Megestrol acetate, Estradiol, Androgens
  • ? AI + palbociclib or entinostat or dasatinib

Living with Metastatic Breast Cancer

New Treatment options:
– ER/PR+:
  – HER2+:
  • Trastuzumab – together with variety of chemotherapy agents
  • Lapatinib
  • Trastuzumab and Lapatinib
  • Pertuzumab
  • Ado-trastuzumab (TDM-1)
  • Combination of endocrine therapies and HER2-targeted therapies in ER+/HER2+
Living with Metastatic Breast Cancer

New Treatment options:
- ER/PR+:
- HER2+:
- TNBC and hormone-refractory ER/PR+
  • Liposomal doxorubicin
  • Platinum analogs
  • Capecitabine
  • Ixabepilone
  • Eribulin
  • Bevacizumab

Living with Metastatic Breast Cancer

Improvements in supportive care
• Reduction in risk of fractures, bone pain

![Graph showing improvements in supportive care](image)

Living with Metastatic Breast Cancer

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Living with Metastatic Breast Cancer

Management of brain metastases

- 10-15% of patients with MBC will develop brain metastases
- More common in HER2+ and TNBC
- Many patients will die of systemic disease, not CNS

Treatment options
- Surgery
- Whole brain XRT
- Stereotactic radiation (‘radiosurgery’)  
  • Ideally ≤ 3 lesions, <1 cm (typically asymptomatic)  
  • Can be repeated for new lesions
- SRS + WBXRT  
  • Decreased risk of recurrence  
  • Increased risk of cognitive decline
Living with Metastatic Breast Cancer
Management of oligometastatic disease
• ? Do patients benefit from treatment for isolated mets
  – Surgery, stereotactic body RT, RFA/cryablation, etc.
  – Retrospective analyses suggest they do, but
  – Selection bias
  – Patient (age, PS, comorbidities) and biology (DFI, ER and HER2+ status) play a role
• Randomized Study proposed
  – Systemic Rx + Local Rx vs. Systemic Rx only in patients with 1-3 mets amenable to local Rx
  – Would it be able to accrue?

Living with Metastatic Breast Cancer
Management of the breast in patients with MBC
• Palliative resections recommended (for pain, ulceration)
• Retrospective analyses suggest improved survival (40% vs. 22% at 3 years); however
  – Selection bias
    Surgical pts were more likely to have
    • Smaller breast tumors
    • Metastatic disease at only 1 site
    But grade, ER status not different
• In animal models, removal of primary sometimes accelerates growth of metastases

Living with Metastatic Breast Cancer
Management of the breast in patients with MBC
Studies presented at SABCS 2013
1) India – Chemo then randomized to surgery or not
  – no difference in mOS or 3-4 year survival
  – Surgical patients less likely to progress locally
2) Turkey - Up-front randomization to surgery followed by systemic Rx* vs. systemic Rx*
  – *Chemo + Herceptin (HER2+) + hormone Rx (ER+)
  – mOS 46 months (Surgery) vs. 42 months (No), p=NS
  – Only patients with solitary bone met may do better
  – Extensive liver or lung mets do worse with surgery
Living with Metastatic Breast Cancer
Management of the breast in patients with MBC
• E2108 designed to address this question (N goal = 368)
  – MBC Pts with CR/PR/SD after 16-32 weeks of systemic Rx will be randomized to local therapy (surgery +/- XRT) vs. not
  – Continuation or resumption of systemic Rx based on status of metastatic disease

Living with Metastatic Breast Cancer
Hurdles beyond medical condition
• Psychosocial
  – Depression
  – Anxiety
  – Sleep disorders
  – Loss of libido
  – Physical limitations
  – Cognitive impairment

Living with Metastatic Breast Cancer
Hurdles beyond medical condition
• Family / Relationship
  – Living with uncertain prognosis
  – Emotional distancing – spouse, children, friends
  – Leaving a legacy
  – Maintaining intimacy
Living with Metastatic Breast Cancer

Hurdles beyond medical condition
- Economic
  - Cost of care
  - Maintaining insurance if not working
  - Ability to work, bias
  - Living on disability

Living with Metastatic Breast Cancer

Appropriate and inappropriate medical care
- Encourage patient to continue seeing PCP and other providers
- However, avoid interventions of questionable value
  - Screening mammograms
  - Screening colonoscopies
  - Treating borderline HTN, hypercholesterolemia

Living with Metastatic Breast Cancer

Hope for the future
- New treatment paradigms
  - Better understanding of disease response and resistance - fewer ineffective, toxic treatments
  - Next generation sequencing – identifying new therapeutic targets
- As treatment improves, we will have more survivors living longer – need to help them and their families cope
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