Navigating A Rare Case of Burkitt Lymphoma in the Third Trimester of Pregnancy

Casey O'Brien, MD; Aditya Sharma, MD; Charles Gaulin, MBBS
Dartmouth Hitchcock Medical Center

BACKGROUND

Cancer is diagnosed in 1/1000 pregnancies each year, with lymphoma occurring in 1/6000 pregnancies. Many factors complicate both diagnosis and treatment given the increased risk to the fetus with imaging and treatments, and a low incidence, precluding larger clinical trials to guide treatment.

CLINICAL PRESENTATION

33-year-old G4P2 woman with a history of Tetralogy of Fallot, repaired during infancy

10/1 — **29 weeks - R mandibular pain and numbness**
Seen in the DHMC ED

10/10 — **Decreased sensation in V3 distribution**
ENT exam in office

10/20 — **Right breast masses noted**
NVRH OB appointment. Ultrasound 3.0 × 1.7 × 2.6 cm lobulated hypoechoic mass at 11 o'clock, 0.4 cm anechoic lesion at 4 o'clock

10/21 — **Persistent pain in R mandible**
Seen in DHMC ED and started on gabapentin

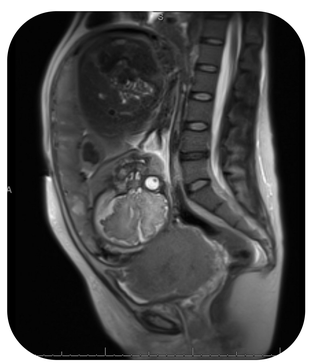
11/19 — **Breast imaging delayed**
34w5d MFM appointment reported unable to schedule ultrasound without mammogram

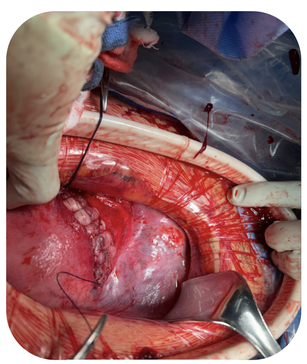
12/3 — **Breast biopsy and pelvic mass discovered**
Biopsy performed. 8-9cm mass obstructing cervix, thought to be uterine fibroid

12/7 — **Scapula pain and worsening masses**
NVRH ED for pain, CTPE performed without PE but noted worsening masses

12/7 — **Neurologic decline and urinary retention**
OBGyn admission at 37w5d
Transferred to OB DHMC with leg weakness, R thigh pain, numbness

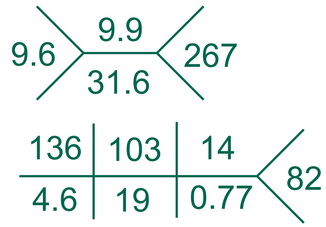
12/8 — **Neurology consultation and MRI**
Neuro noted RLE > LLE weakness and recommended MRI



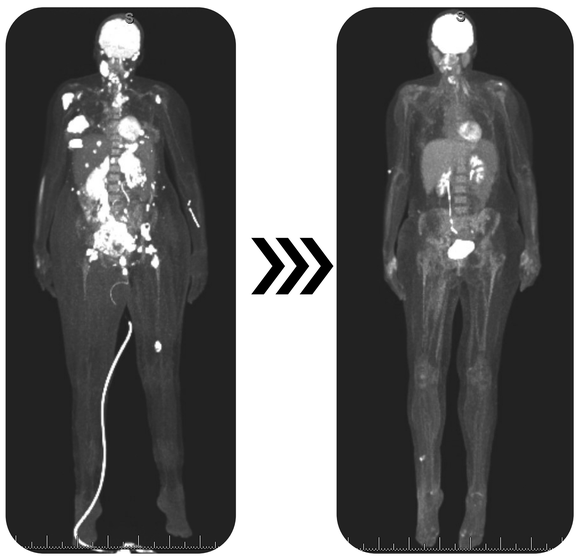


TREATMENT COURSE

- Patient started on dexamethasone 4mg Q6H
- Urgent classical C-section performed, baby born healthy and patient transferred to hematology service
- On hematology service, patient was initiated on the modified Magrath CODOX-M alternating with IVAC plus Rituximab
- Her baby was discharged from nursery and stayed in her room in a bassinet
- Unfortunately, due to chemotherapy, she was unable to breastfeed and had to pump and discard her breastmilk
- Her course was complicated by mucositis, DVT/PE, neutropenic fever, post-operative ileus requiring holding of vincristine, and persistent neurologic deficits
- She was discharged to acute rehab after 4 cycles and 87-day hospital stay



Phos	3.4
Ca	8.7
Uric acid	8.0
LDH	349



DISCUSSION

- This case highlights some of the difficulties of peripartum malignancies
- Her presenting symptom was mandibular pain, which later was revealed to be due to a mass compressing her trigeminal nerve
- Physiologic changes during pregnancy, particularly changes in breast tissue, can make a malignant mass be much lower on the differential
- This patient was at term when treatment became urgent; however, many cases require careful decision making around chemotherapy given fetal toxicity risk
- In this case, breastfeeding was a discussion and unfortunately was not an option