

Distinguishing between recurrent breast cancer or a new primary adenocarcinoma

Tipton Hospital, Tipton, IN

Provisional Diagnosis: Uncertain metastatic adenocarcinoma

Final Confirmed Diagnosis: Colorectal cancer (intestinal)

Initial Staining/Scan History:

- Ultrasound of abdomen: three masses in liver suspicious for metastasis
- CT scan Dx: extensive liver metastases
- CEA: 471 (elevated)
- CA 27 29: 36.1 (wnl)
- CA 19-9: 522.6 (elevated)
- CA 125: 25.4 (wnl)
- Chromogranin A: 36 (wnl)
- Neuron Specific Enolase: 17.8 (elevated)
- New anemia at time of diagnosis

Case Summary:

An elderly female with two previous primary breast cancers presented at Tipton Hospital complaining of abdominal pain. Bloodwork revealed elevated liver enzymes; a CT scan performed shortly after showed extensive liver metastases.

Treatment for the previous primary cancers comprised of:

- Chemotherapy and hormone treatment for the first breast cancer (diagnosed in 1993). The patient's medical team stopped hormone therapy when uterine cancer developed. They subsequently treated the uterine cancer with surgery and radiation.
- Mastectomy to address the second primary cancer, ductal carcinoma in situ (DCIS), diagnosed in 2002.



Following the DCIS, the patient had a variety of other illnesses and health issues, but there was no further indication of cancer until she appeared at the Tipton Hospital emergency room in late 2008.

Susan Kirby, RN, OCN and oncology program coordinator says, *“Of course, the question was: is this recurrent breast cancer?”*

Due to the time lapse and the results of patient follow-up monitoring over the interceding years, the patient’s oncologist felt strongly that the current metastatic disease was from a new primary cancer—not metastasis from the previous breast cancers.

To help obtain a more definitive diagnosis, the hospital next performed a guided liver biopsy, which resulted in a diagnosis of metastatic adenocarcinoma.

Kirby had recently obtained information about the THEROS CancerTYPE ID test; she placed it on the oncologist’s desk a few weeks prior to this case presentation. The oncologist felt the THEROS CancerTYPE ID test could be helpful for the current case and asked that the tissue sample be ordered. One week later, the THEROS CancerTYPE ID test results were back, predicting a primary intestinal cancer. A colonoscopy performed that week revealed a colon mass that the CT had missed. Biopsies of masses from the cecum revealed a high-grade, invasive adenocarcinoma.

Clinically, a definitive diagnosis in this case enabled the oncology professionals to begin treatment with FOLFOX 6 plus Avastin as treatment for metastasized colon cancer.

“Oncologists can’t treat without a diagnosis,” said Kirby. *“And we certainly weren’t going to start treating this patient for breast cancer without more certainty that this is what she was fighting.”* While the breast cancer treatment for this patient would have varied depending on IHC and FISH study results and other diagnostic features, Kirby says that *“the treatment would definitely not have been FOLFOX.”*

From the patient’s perspective, the definitive diagnosis *“helped her tremendously because we could assure her we were treating her appropriately,”* said Kirby. *“Once we told her the results of the THEROS CancerTYPE ID test and explained the course of treatment, she said, ‘You’ve given me some hope - and that’s all I needed.’”*



Molecular Diagnostics in Oncology

Toll Free +1 (877) 886 6739
www.biotheranostics.com