Review of Diagnosis to First Course Treatment Interval in Breast Cancers

Time from diagnosis to initiation of definite treatment plan (Surgery or neoadjuvant chemo) among Breast cancer patient with clinical stage 0-III diagnosed in the year 2017.

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Breast cancer is the most commonly diagnosed cancer and a leading cause of death among female patients with cancer following lung cancer. Concerns about delay in the initiation of treatment has been present for over a century exemplified by Dr. Halstead’s quotation “we no longer need the proof...(that) the slightest delay is dangerous...in the early stage of breast cancer” in 1907.

American Society of Clinical Oncology (ASCO) has published quality control measure for early breast cancer requiring Adjuvant chemotherapy to be started by 120 days after diagnosis and radiation to be started by 365 days since diagnosis.

Surgery is often the first part of definitive treatment in early breast cancer. There are no clear-cut guidelines for the timing of surgery since diagnosis. Various retrospective large population-based studies have shown that slight delays as needed for reasons such as more imaging and multidisciplinary consultations will not adversely affect outcomes; alleviating much of anxiety surrounding the initial diagnosis. However, larger delays have shown to increase disease specific mortality and decrease survival. One large SEER- Medicare database and National Cancer database study showed every 30-day delay in surgery increased overall mortality, and every 60-day delay in surgery decreased the Disease Specific survival for breast cancer. Although there is controversy regarding early initiation of treatment based on conflicting reports, significant delay does affect key factors like mortality.

Based on the data available, it is becoming a standard to limit the delay in time to surgery to <90 days, with emphasis on earlier treatment.

As part of the quality improvement study at TMC, we evaluated the time from tissue-based diagnosis to the initiation of definitive treatment. Since neoadjuvant treatment is being adopted more often, we included timing of neoadjuvant treatment in addition to timing of surgery, whichever came first, for the analysis.

All the patients with early stage (stage 0-III) breast cancer diagnosed in the year 2017 were included. Patients were identified via tumor registry. Data was collected in reference to the point of interest.
Results:

Total no of patients evaluated: 66
Excluded 15 (6 went to different facility, 5 refused treatment, 2 lost to follow up, and 2 had metastatic disease)

Total patients evaluated: 51
Median age: 59 years (range, 21-85 years)
There were 3 patients who received neoadjuvant chemo (6%) as the initial part of their definitive plan. 2 out of 3 were Triple Negative and one of them enrolled in clinical trial. The 3rd one was ER/PR positive, Her 2 negative.

All patients, including the ones who got neoadjuvant chemotherapy, underwent surgery (n=51).

Timing of initiation of definitive treatment:

≤30 days: 11 patients.
31-60 d: 28
61-90 d: 7
91-120d: 3
121-180d: 1
>180d: 1

Median time from diagnosis to beginning of treatment was 43 days (Range: 12 – 204 days)

Patient distribution based on time to definitive treatment
Majority of patients started treatment in the 31-60 day period: 29 (54%).
5 (10%) of the patients had their treatment delayed beyond the recommended 90-day interval.

Conclusion:

1. Most of the newly diagnosed breast cancer patients at TMC get their treatment started within the recommended 90-day period from diagnosis. This should also allow the patients to get started with chemotherapy if required within 120 days of diagnosis as recommend by the ASCO guidelines.
2. Efforts need to be made to improve upon these results – with the goal to follow up on all the patients and make sure they get their definitive treatment in the first 60 days itself.

Recipient:

1. Breast cancer Navigator to help keep track of patients so that no one is lost to follow up.
2. Making sure that the patients referred to breast biopsy have breast clinic f/w appoint to follow up on the results.

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