

Cancer Diagnostics Conference & Expo

June 13-15, 2016 Rome, Italy

Perspectives of the liquid biopsy in clinical oncology

Mario Pazzagli

University of Florence, Italy

Liquid biopsies are non-invasive blood diagnostic tests that detect circulating tumor cells (CTCs) and/or fragments of tumor DNA that are shed into the blood from the primary tumor and from metastatic sites. This approach can have an enormous diagnostic and treatment implication for oncology that can transform clinical oncology practice and that it is part of the personalized medicine. Whereas tumor genome sequencing is already central to inform treatment decisions and the management of oncological patients, the liquid biopsy may represent the non-invasive approach to monitor tumor genomic changes in real time. This will allow clinicians to ensure that the therapy they have selected based on a particular molecular target, remains relevant and eventually observe the emergence of any resistance. Eventually, it would be possible to observe if any new molecular targets appear that could be suitable for a different treatment. All this could help to provide patients with the right treatment for the right target without delay. Liquid biopsies also present us with a unique opportunity to move forward with our understanding of metastatic disease development and they may help to identify signaling pathways involved in cell invasiveness and metastatic competence. Moreover these tests have the possibility to be used in screening programs at least for some kind of cancers. At the end, the liquid biopsy can revolutionize cancer care, providing clinicians with rapid access to information on a molecular level at diagnosis, thereby optimizing treatment choices.

m.pazzagli@dfc.unifi.it

Prognostic value of breast cancer subtypes based on ER/PR, Her2 expression and KI-67 index in women received adjuvant therapy after conservative surgery for early stages breast cancer

Menna Fouda

Tanta University, Egypt

Introduction: Breast cancer is the most common malignancy in women, accounting for 29% of all female cancers. It accounts for <1% of all cancer cases in men. In a population based cancer registries in Gharbia, Egypt, breast cancer was the most frequent cancer among Egyptian females. Prognostic information for the individual patient is based on the analysis of biological markers in the primary tumor including (ER), (PR), (HER2) and Ki67, together with age, tumor size, histological grade and lymph node involvement. Molecular subtyping of breast cancer may provide additional prognostic information regarding patient outcome.

Objectives: To evaluate the prognostic effect of breast cancer subtypes on local relapse rates, distant metastases, and survival in women who underwent breast conservative surgery for early stages breast cancer.

Material & Methods: Data of 100 patients affected by early stage breast cancer and treated with breast-conserving therapy were reviewed. Patients were grouped, based on the basis of receptor status and HER-2 status, patients were grouped, as: Luminal A (ER + and/or PR+, Ki67 low and HER2-), luminal B (ER+ and/or PR+, Ki67 high and/or HER2+), HER2-positive (ER-, PR- and HER2+) and triple negative (ER-, PR, HER2-). Distribution of variables among subtypes was evaluated with Pearson's test. Survival rates were calculated with life tables; Cox regression stepwise method was used to identify predictive variables of survival.

Results: Median age was (range 18-50) and median follow up time of 40 months (range 36.83-43.17). Breast cancer specific survival and distant metastases rates were different among breast cancer subtypes (both outcomes $P=0.001$), there was significant difference regarding local relapse rates ($P=0.002$). Axillary nodes status ($P=0.007$), adjuvant therapy ($P\leq 0.001$) and breast cancer subtypes resulted prognostic factors of breast cancer specific survival; axillary node status ($P=0.007$) and breast cancer subtypes had an impact on distant metastases.

Conclusions: In our study, breast cancer subtype seems a prognostic factor of breast cancer specific survival and distant metastases rates & of local relapse rate. Patients could be submitted to conservative surgery, if feasible, but considering the differences in survivals, patients with worse prognosis should receive more aggressive adjuvant treatment

oncologistmenna@yahoo.com