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MOLECULAR PROFILE AND PATHOLOGICAL RESPONSE AFTER NEOADJUVANT CHEMOTHERAPY IN PATIENTS UNDERGOING SURGERY FOR BREAST CANCER IN THE MASTOLOGY UNIT OF THE HOSPITAL DE BASE DO DISTRITO FEDERAL BETWEEN 2014 AND 2016

Gabriela F. L. de Albuquerque¹, Cristiano A. A. de Resende¹, Mauro P. Passos¹¹Instituto Hospital de Base do Distrito Federal – Brasília (DF), Brazil.

Breast cancer is a heterogeneous entity regarding clinical presentation and biological behavior. Prognostic and predictive factors have been investigated to guide best strategy for therapeutic approach. Neoadjuvant chemotherapy (NC) is gaining ground in primary treatment of breast cancer and the complete pathological response (pCR) to this therapy is prognostic marker. **Objectives:** Detect tumor subtypes that presented most pCR after NC, incidence of different subtypes of breast cancer, and clinical/histological characteristics that may contribute to better response to NC treatment. Define patient profile that would benefit from initial systemic treatment. **Methodology:** Analytical study with review of medical records of 174 patients older than 18 years with breast cancer and submitted to NC. From total, 14 were excluded by diagnosis of metastasis and 22 patients for lacking information in records. Included 139 patients, where pathological response, chemotherapy, molecular subtypes, and immunohistochemistry (IHC) profile were analyzed. **Results:** From 139 patients, twenty-four (17.3%) presented pCR after NC and 115 had partial or no response. Relating IHC to pathological response, no patients luminal A obtained pCR. In HER2 negative luminal B group, seven of 50 patients had pCR (14%). The 21 HER2 + luminal B patients presented 9.52% pCR. In more aggressive subtypes there was significantly higher percentage - four pCR among 11 superexpressed HER2 + patients (36.36%) and 11 pCR of 39 triple negative patients (28.20%). **Conclusions:** pCR varies between different molecular subtypes of breast cancer being prognostic factor in aggressive subtypes. It is well-established the indication of NC for specific cases, so it is possible to probe the research to optimize the early treatment in this group. The creation of standardization care - from patient's reception, encompassing initial clinical evaluation, tumor staging, and molecular classification - can act as a trigger for future service growth, improving early treatment, and obtaining better long-term results.