Abstract:

Inflammatory breast cancer (IBC) is one of the most aggressive breast cancers because of its high potential metastatic. The positive diagnosis of (IBC) is based on the clinical signs and symptoms required which are erythema occupying at least a third of the breast, edema and / or dermal edema (peau d'orange) of the chest, and / or a warm breast, with or without an underlying palpable mass. The appearance of these signs and symptoms should be rapid and its duration at initial presentation should be 3 months. Despite the progress made in the management of IBC through multimodal treatment, the prognosis remains poor with low overall survival. The incidence of IBC is variable. It is rare in Europe and the United States, accounting for less than 2% of breast cancers (BC), and more common in North Africa where incidence accounts for more than 5% of BC. There are no definitive molecular or pathological diagnostic criteria for IBC. We were particularly interested in the Aldehydedehydrogenase 1 (ALDH1) gene responsible for the oxidation of aldehydes.

As part of this work, we have:

 (i) Tried to better understand the unique epidemiological and clinical aspects of IBC.
Our prospective study was able to determine the exact incidence of IBC that was 3%. In our series we could not show the usefulness of the punsh biopsy for the confirmation of the diagnosis of IBC.
 (ii) Evaluated whether ALDH1 could be a new specific marker for IBC. For this, RT-PCR analyzes were performed on IBC tumor samples (N = 82). Correlations between ALDH1 expression and clinical and laboratory criteria have been established

Keywords: Inflammatory breast cancer; punsh biopsy; molecular profile

Accredited Research Structure: Translational Oncology Research Team