PREDICTIVE FACTORS OF NON-SENTINEL LYMPH NODE INVOLVEMENT IN EARLY BREAST CANCER

Objective For a long time, axillary lymph node dissection (ALND) was routinely performed in patients with an involved sentinel lymph node (SLN). However, in 30 to 50% of cases, the non-sentinel lymph nodes (NSLN) were not involved, and these patients would have suffered the morbidity of ALND excessively. The aim of our study was to identify the risk factors for NSLN involvement in patients with a positive SLN.

Methods We included patients with early breast cancer and positive sentinel node who underwent ALND in Salah Azaiez Institute of Oncology between 2005 and 2018. We analyzed retrospectively the clinicopathological data to predict NSLN involvement.

Results Among the 77 selected patients, 36% did not have any NSLN involvement during the pathological examination of the ALND product. Univariate analysis using α=0.05 as the significance level, showed that radical surgery (p=0.05), tumor size >30 mm (p=0.01), number of extracted SLN ≤2 (p=0.02), number of positive SLN >1 (p=0.01), ratio positive SLN/extracted SLN >0.5 (p=0.05), macrometastasis × 10⁻³, SBR III grade (p=0.007), and Ki67 >20% (p=0.04) were predictive of NSLN involvement. In multivariate analysis, the type of surgery, the tumor size, the Ki67 level and the ratio Positive SLN/Extracted SLN were excluded. Only the number of extracted SLN ≤2 (OR=18.518, CI=1.402–250, p=0.027), the number of positive SLN >1 (OR=9.624, CI=1.266–73.172, p=0.029), SBR III grade (OR=58.82, CI=2.86–1000, p=0.008), and macrometastasis (OR=759.19, CI=10.166–56698.2, p=0.003) were found to be independent risk factors of NSLN involvement.

Conclusions Our results prove that there is a correlation between tumors’ clinicopathological features and NSLN involvement. Therefore, a careful study of these criteria could avoid unnecessary ALND in patients with positive SLN who do not need it.

EVALUATION OF THE RELIABILITY OF THE EXTEMPORANEOUS PATHOLOGICAL EXAMINATION FOR THE PATHOLOGICAL DIAGNOSIS OF BREAST TUMORS

Objective We aim to compare the performance of the extemporaneous pathological examination (EPE) to the definitive pathology examination (DPE) for the pathological diagnosis of the nature of breast tumors.

Methods It is a retrospective single-center study including all the patients who an EPE to determine the pathological diagnosis of the nature of a breast tumor in our institution from 2007 to 2017. The uninterpretable samples because totally necrotic, crushed, electro-coagulated, and/or poorly preserved were excluded. We did evaluate the performances of the EPE of the surgical margins by calculating the sensitivity, specificity, positive predictive value (PPV), false negative (FN), positive predictive value (PPV), negative predictive value (NPV), diagnostic efficacy, and the Youden index.

Results The EPE was performed 366 times for the evaluation of surgical limits. DPE objectified 279 healthy limits (76.2%) and 87 tumoral limits (23.8%). Of the 366 EPE carried out, the EPE was concordant with the final examination in 321 cases and discordant in 45 cases including 27 FN and 18 FP. The FN rate was 4.9%. The statistical analysis has shown that the EPE for the evaluation of the surgical limits had a sensitivity of 68.97% and a specificity of 93.55%. The positive and negative predictive values were 76.92% and 90.63% respectively. The diagnostic efficiency of the EPE for the surgical margins in conservative breast surgery was 87.70% and the Youden index was 0.63.

Conclusions Regarding the evaluation of the surgical margins in conservative breast surgery, the EPE has a low sensitivity and a high rate of false negatives.
Abstracts

Conclusions The EPE for histological diagnostic purposes in the management of breast tumors remains an excellent diagnostic test when no preoperative diagnostic tools are available.

Objectives Mutations on BRCA1/2 genes are known to confer high risk of breast and ovarian cancers. The identification of these mutations not only helped in selecting high risk individuals that need appropriate prevention approaches but also led to the development of the PARPi therapy. This study aims to evaluate the Eisenger score (ES) risk for hereditary form of breast cancer.

Methods We calculated in 200 patients with breast cancer (BC) the ES which is a score taking into account all family history validated for oncogenetic consultation (GC). A GC was indicated for any ES >2. The method used for the genetic study was next generation sequencing (NGS).

Results The average score was 5.9 with externes ranging from 0 to 17. Two patients had a score of 0: the first had a mother who died of BC at 80 years and the second had a cousin who had pancreatic cancer at early age. A majority of 85.7% of patients had an indication for family GC (ES >2). In 14.3% of patients, the usefulness of the genetic investigation we considered low according to the score. Among the 200 patients, we were able to perform only 28 genetic studies.

Conclusions The ES is predictive of BC risk in BRCA1 and BRCA2 carriers. This score must be carried out systematically in order to optimize the therapeutic management.

Objectives The Primary Integrated Care for Four Chronic Diseases (PIC4C) is an initiative by the Kenyan Ministry of Health and Moi Teaching Hospital to pilot screening, referral, treatment integration for diabetes, hypertension, breast cancer, cervical cancer in Busia and Trans-Nzoia, Western Kenya. A major aspect of the PIC4C qualitative arm was to determine how localized knowledge affects perceptions of breast cancer causes in the two counties and to use this information to develop targeted interventions.

Methods 174 participants were included in 18 focus group discussions (FGDs) engaging patients, community members (CHVs), health care providers (HCPs). 12 patients with breast cancer were included in patient FGDs. The group sessions were facilitated by trained moderators and captured using audio recorders and field notes. Two analysts independently coded and analyzed the data using NVivo 12.

Results Overall, patients, CHVs, HCPs perceived breast cancer to be a chronic disease that could be treated, but led to death. All participants perceived genetics, unhealthy eating, low breastfeeding rate to cause breast cancer. Three factors were reported by patients and community members, but not by HCPs: poor breast hygiene, poorly fitting bras, witchcraft. Only HCPs cited smoking as a cause of breast cancer.

Conclusions This study reports how localized knowledge affects perceptions of breast cancer causes in Busia and Trans-Nzoia. Our study shows that misconceptions and inadequate knowledge about breast cancer causes persist in the two counties. Our findings suggest a need for improved screening and treatment via dedicated health education campaigns, treatment resources, training for CHVs and HCPs to ensure communities receive accurate information.