Breast Implant–associated Anaplastic Large Cell Lymphoma in Colombia: Report of a Multidisciplinary National Registry*

Background: An estimated 43,390 breast augmentation surgeries (86,780 implants) and 1486 breast implant reconstructions are performed annually in Colombia, representing the second-most breast surgery destination in South America, the fourth in the western hemisphere, and the fifth country worldwide. No previous reports have evaluated the incidence of breast implant–associated anaplastic large cell lymphoma (BIA-ALCL) epidemiology or outcomes in a Hispanic population. Published data on the incidence of this disease in Colombia are unknown; therefore, a National Joint Multidisciplinary Committee was developed between the Colombian scientific societies of Mastology, Plastic Surgery, Hemato-Oncology, and the Invima (The National Food and Drug Surveillance Institute) to track national cases of BIA-ALCL.

Materials and Methods: We performed a retrospective review (survey-based study) of historical cases since 2011–2019, and a prospective collection of all patients with a confirmed World Health Organization diagnosis of BIA-ALCL identified in a newly established National Registry of BIA-ALCL. The trial was approved by Institutional Review Board (IRB).
**Results:** Eighteen cases of BIA-ALCL were identified in Colombia between 2011 and 2019. Hundred percent developed as sequelae of textured implants. Six patients (33.3%) presented either a peri-implant capsule mass or axillary lymph node involvement. Seven (38.9%) required adjuvant chemotherapy most commonly with CHOP regimen. Different brands of implants were associated with our cases. One death (5.6%) was attributed to BIA-ALCL, and one (5.6%) case displayed with relapsed with bone marrow involvement requiring a bone marrow transplantation. Six cases (33.3%) were identified with advanced stage (IIB-IV). Disease-free survival of 92.3% was achieved at 30.8-month follow-up.

**Conclusions:** Colombia has one of the highest volumes of breast surgery and use of textured surface breast implants in the world. This study is the initial report of an implant registry in South America. A high proportion of advanced disease may be a consequence of delayed presentation, lack of disease awareness, and timely access to tertiary cancer centers for diagnosis and treatment. Brands other than Allergan and Mentor were found to be associated with BIA-ALCL in our study.

**Palabras Clave**
Breast Lymphoma; BIA-ALCL; Implants; Breast; Lymphoma.