

The management of the sentinel lymph node biopsy in breast cancer

Abstract

Background

Breast cancer is a public health issue due to its high incidence and mortality in advanced stages, being the second leading cause of death worldwide in recent years. As breast cancer is lymphophilic (the disease is spread mainly through the lymphatic system), axillary surgery remains essential in the treatment and staging of this condition

Methods

Sentinel lymph node biopsy has become the gold standard for axillary nodal staging and prognostic decisions, successfully replacing total axillary lymphadenectomy. This procedure has evolved significantly in the last 30 years and represents a topic of great relevance and interest.

Results

Certain issues related to the sentinel lymph node (identification techniques, indications and contraindications, the role of adjuvant therapy), will be highlighted in this presentation. The new techniques used (green indocyanine, superparamagnetic iron oxide nanoparticles and contrast ultrasound using microbubble as a contrast agent) have proven to be safe and feasible, with high specificity and sensitivity.

Conclusions

The status of the axillary lymph nodes is one of the most important prognostic factors in breast cancer patients. This presentation aims to compare the results of the sentinel lymph node biopsy versus total lymphadenectomy, to highlight the main indications and contraindications of its procedure and to present the benefits of the new techniques using those used so far.