Selective sentinel lymph node biopsy and primary systemic therapy in breast cancer

Antonio Piñero¹, Julia Giménez², Sergi Vidal-Sicart³, and Mattia Intra⁴

¹Department of Surgery, “Virgen de la Arrixaca” University Hospital, Murcia; ²Department of Surgery, Valencian Institute of Oncology Foundation, Valencia; ³Department of Nuclear Medicine, Hospital Clinic, Barcelona, Spain; ⁴Division di Senologia, European Institute of Oncology, Milan, Italy

ABSTRACT

Aims and background. Sentinel lymph node biopsy has become an ordinary method for breast cancer staging. Neoadjuvant chemotherapy has been considered one of the contraindications for sentinel lymph node biopsy due to potential secondary fibrosis and lymphatic distortion. Timing and influence on sentinel lymph node biopsy result by primary systemic therapy are current and controversial topics.

Methods and study design. The experience in the medical literature is reviewed. A search was performed in the following databases: Medline (through Pubmed), EMBASE, Tripdatabase and Cochrane Library, between January 1998 and December 2008.

Results and conclusions. After analyzing the conclusions from 42 series and waiting for the end of related prospective trials, it could be concluded that sentinel lymph node biopsy is a useful diagnostic tool that should be integrated in the algorithm for the management of breast cancer patients when primary systemic therapy is needed. Free full text available at www.tumorionline.it