Comment on a previously published practice guidelines article

Smeets A, Carly B, Cocquyt V, Vanhoeij M, Bourgain C, Lifrange E, et al. The changing role of axillary dissection in the treatment of breast cancer. *(Belg J Med Oncol 2012;3:147-148)*

Dear Editor,

As a pathologist I would like to comment on the previously reported practice guidelines article on the sentinel node procedure (SNP) for breast cancer published in the BJMO. In my opinion, the statement to recommend intraoperative examination is not evidence-based. The sensitivity of a frozen section sentinel is only 75% though the specificity is almost 100%.[1-3] Furthermore, there is a definite loss of tissue while doing the frozen section, meaning a potential loss of tumour. Touch-imprint with alcian blue or fast immunohistochemistry (IHC) can help, however, there is no nomenclature, it is slow and costly. When recommending a procedure one should state the protocol in the practice guideline. Should we do levels on the frozen section (as in Italy)? 3x150μm? 3x250μm? Should we do IHC on the 3 levels? Without a previous frozen |section, IHC upstages up to 19% of the patients.
The postoperative sentinel node procedure (SNP) should have been outlined here to get a standardised protocol for all Belgian pathologists, similar to national guidelines formulated in The Netherlands.[3] This guideline states that "A lymph node up to 0.5 cm enclose completely; lymph nodes greater than 0.5 to 1.0 cm cut lengthwise and embed each half so that the centre is cut; nodes larger than 1 cm lamellate and embed in toto. Paraffin blocks are cut at least at 3 levels with 250 μm spacing, each level is HE-stained. IHC with antibody against keratin (CAM5.2 or AE1/AE3) is added in case of HE-negative sentinel. For practical reasons you may want to do the IHC immediately. In practice, this means that practically any sentinel node (SN) is halved, and thus cut at least into 6 levels."
Furthermore, the molecular intraoperative technique one-step nucleic acid amplification (OSNA) was not advised routinely and "is under investigation", though it is a technique that has already been studied for 5 years with definite results in 30-40min intraoperative equalling the 3 levelling postoperative SNP.[4-8] As such, this is not just promising and should be used if one recommends intraoperative SNP.

With kind regards
B. Lelie, MD, pathologist

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Reply A. Smeets

We thank Dr. Lelie for his letter regarding our manuscript. However, we have to disagree on some of the points raised.

First, the need for intraoperative analysis is not driven by sensitivity, but to decide on immediate completion axillary lymph node dissection. Patients with a positive sentinel lymph node on intraoperative examination have a significantly higher risk for additional positive non-sentinel lymph nodes and therefore are candidates for a completion axillary lymph node dissection during the same surgery.[1]

Second, as touch imprint cytology and frozen section yield similar results, the choice of intraoperative assessment of the sentinel lymph node (SLN) can be left to institutional as well as personal preferences.[2]

Third, molecular approaches to examine the SLN can still not be recommended for routine use. It is correct that these techniques can identify tumour cells. However, there is no single marker to identify tumour cells unequivocally. There is currently no validated multimarker polymerase chain reaction (PCR) available and guidelines for handling the sentinel node for molecular analysis have not yet been established. Moreover, molecular techniques detect more low volume nodal involvement, but it is uncertain whether these require further axillary treatment. Finally, there is no reimbursement for these tests.

We agree with Dr. Lelie that there is an urgent need for national guidelines for the pathologic evaluation of sentinel lymph nodes. The breast pathology working group is currently establishing a draft for such guidelines.

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