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Sentinel Lymph Node Biopsy – The „Gold Standard" in Germany

Interdisciplinary Guidelines and new aspects of Sentinel Lymph Node Biopsy

Contents

1. Surgical Treatment of the Axilla

- Determination of the histological node status (pN status) is part of the surgical treatment of invasive breast cancer
- Sentinel Lymph Node Biopsy (SLNB) is equal to axillary dissection with regards to local control
- The morbidity after SLNB is significantly reduced compared with axillary dissection
- In patients in whom SLNB is not possible or in whom the sentinel node is positive (exception possible), axillary dissection of at least 10 lymph nodes (level I and II) must be carried out

1. Surgical Treatment of the Axilla

- If the sentinel node is excised, the quality criteria set out by the medical associations must be satisfied

- SLNB is characterized by
  -> high staging accuracy
  -> considerably reduced shoulder morbidity

- Suitable patients for SLNB are women with T1 and T2 tumors

- SLNB is not indicated
  -> clinical suspicion of advanced lymph node involvement
  -> infiltrated lymph nodes (more than two)

1. Surgical Treatment of the Axilla

- SLNB permits reliable prediction of node status in patients with multi-centric carcinomas
- SLNB is possible with a neoadjuvant chemotherapy
- SLNB is possible after smaller excisional biopsies
- In women with more than two positive nodes surgical clearance of the axillary lymph node is indicated

1. Surgical Treatment of the Axilla

Case of a neoadjuvant chemotherapy (NACT)

- SLNB is possible before NACT in case of clinical free lymph nodes
  -> If Sentinel node is negative Axillary lymph node dissection (ALND) is not recommended
  -> If Sentinel node is positive ALND is recommended

- SLNB after NACT is not recommended because of a high false negative rate

1. Surgical Treatment of the Axilla

- If isolated tumor cells SN(i+) are detected in the Sentinel node (immunohistochemical analysis)
  -> ALND is not recommended

- If micro metastases SN+(mic) are detected in the Sentinel node
  -> ALND is not recommended

- DCIS does not require SLNB

- Tumor T1/T2, cN0, <3 SN+, BET+, tangential radiotherapy, adequate systemic treatment
  -> ALND is possible, but not required

2. Lymph Nodes

- Lymph node status is determined on the basis of the histological examination of all lymph node removed

- Documentation of the following is mandatory:
  -> Number of lymph nodes removed and involved
  -> capsule penetration
  -> pN category

2. Lymph Nodes

Axillary lymphadenectomy

- Traditional procedure

- The aim of the histological examination is to detect all macrometastases (> 2 mm)

2. Lymph Nodes

Sentinel lymph node biopsy (SLNB)

- Removal of the so-called Sentinel node
- The preferred procedure for determination of node status
- The minimum aim of the histological examination is to detect all macrometastases (>2 mm)
  - -> Complete workup of the paraffin sections with small cutting levels (<500 µm)
  - -> Cytokeratin immunohistochemistry for the detection of micrometastases

3. Indications for SLNB

SLNB is recommended

- If clinical cN0 and sonography with a negative axilla
- Tumor T1/ T2

3. Indications for SLNB

SLNB is possible

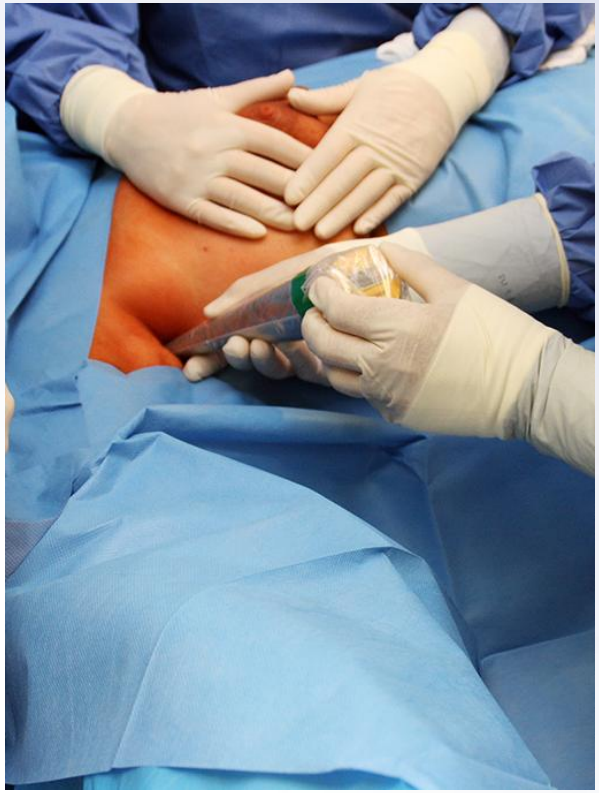
- Excessive Ductal Carcinoma in Situ (DCIS) in case of an suspected invasion
- Mammary Carcinoma (MaCa) in a male
- MaCa of older people
- During pregnancy and breast feeding
  -> no blue dye
- After previous breast reduction operations

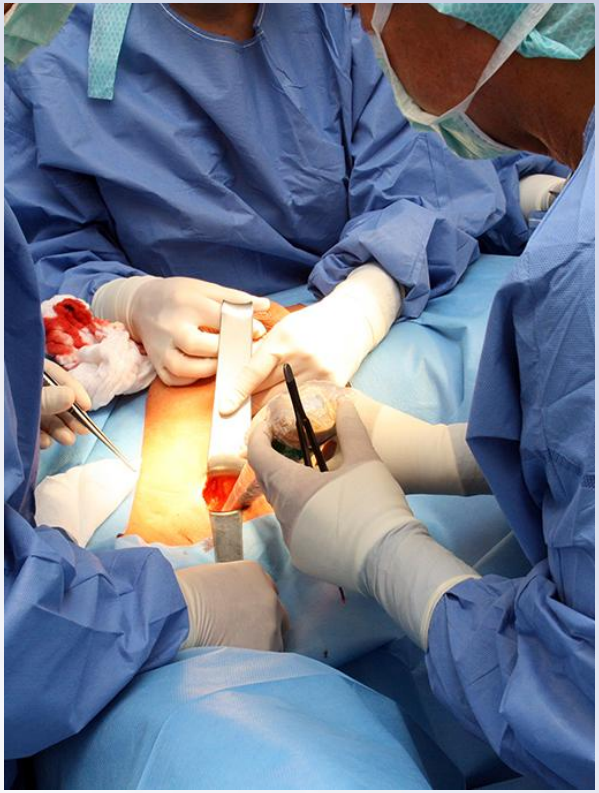
3. Indications for SLNB

SLNB is questionable

- Tumor T3/ T4
- Multi-centric MaCa
- After previous SLNB
- After previous axilla surgery
- Inflammatory MaCa

Any Questions?





Procedure undertaken with Gamma Finder®

Thank you for your attention

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