Lesions of Uncertain Malignant Potential (B3)

(ADH, LIN, FEA, Papilloma, Radial Scar/Complex Sclerosing Lesion)
Lesions of Uncertain Malignant Potential (B3)

Versionen 2005–2023:
Albert / Audretsch / Bauerfeind / Brunnert / Ditsch / Fallenberg / Fersis / Friedrich / Friedrichs / Gerber / Huober / Kolberg-Liedtke / Kreipe / Maass / Nitz / Reimer / Rody / Schmidt / Schreer / Sinn / Thomssen

Version 2024:
Friedrich / Sinn

Pubmed 2010-2023 queries
Lobular neoplasia (169 Results)

Atypical ductal hyperplasia (101 Results)

Flat epithelial atypia (59 Results)
AND ("2012/01/01"[dp] : "2023/01/01"[dp]) AND ("flat epithelial atypia"[ti] OR "columnar cell"[ti] OR "FEA"[ti]) AND ("english"[la] OR "german"[la])

Papilloma (278 Results)

Radial scar (25 Results)

National and international guidelines
1. AWMF, Deutschen Krebsgesellschaft e.V. und Deutschen Krebshilfe e.V. (Hrsg.). Interdisziplinäre S3-Leitlinie für die Diagnostik, Therapie und Nachsorge des Mammakarzinoms. Langversion 4.0, Aktualisierung 2021 http://www.leitlinienprogramm-onkologie.de/leitlinien/mammakarzinom/

B3-Lesions

1. Lesions with increased risk of associated DCIS or invasive carcinoma
   - Atypical ductal hyperplasia (ADH) or atypical epithelial proliferation of ductal type (classification possibly as B4, depending on extent of lesion)
   - Flat epithelial atypia (FEA)
   - Lobular neoplasia (LIN; LN; now subdivided into ALH and LCIS, no differentiation according to older nomenclature) classical and non-classical type
   - Atypical apocrine adenosis

2. Potentially heterogeneous lesions with risk of incomplete sampling
   - Cellular fibroepithelial lesion or phyllodes tumour without evidence of malignancy
   - Intraductal papilloma with / without atypia (possibly also B4, depending on the extent of the lesion)
   - Radial scar or complex sclerosing lesion (unless the radial scar only microscopically, not radiologically detected: B2)
   - Hemangiom

3. Rare Lesions
   - Adenomyoepithelioma, nipple adenoma, microglandular adenosis, mucocele-like lesion, nodular fasciitis, desmoid-type fibromatosis, spindle cell lesion of unknown significance

2. AWMF, Deutschen Krebsgesellschaft e.V. und Deutschen Krebshilfe e.V. (Hrsg.). Interdisziplinäre S3-Leitlinie für die Diagnostik, Therapie und Nachsorge des Mammakarzinoms. Langversion 4.0, Aktualisierung 2021 http://www.leitlinienprogramm-onkologie.de/leitlinien/mammakarzinom/ 


8. Neal L, Sandhu NP, Hieken TJ et al.: Diagnosis and management of benign, atypical, and indeterminate breast lesions detected on


Strategy after Diagnosis of ADH in Biopsy Specimen

<table>
<thead>
<tr>
<th>Oxford</th>
<th>LoE</th>
<th>GR</th>
<th>AGO</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADH in core-/ vacuum-assisted biopsy:</td>
<td>3a</td>
<td>C</td>
<td>++</td>
</tr>
<tr>
<td>- Open excisional biopsy</td>
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<tr>
<td>- Open excisional biopsy may be omitted, if all following requirements apply:</td>
<td>5</td>
<td>C</td>
<td>+/-</td>
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<tr>
<td>a) No mass-lesion radiologically, and</td>
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<tr>
<td>b) a small lesion (≤ 2 TDLU*) in vacuum biopsy, and</td>
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<td>c) complete removal of imaging abnormality</td>
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<td></td>
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<tr>
<td>ADH at margins in open biopsy specimen:</td>
<td>3a</td>
<td>C</td>
<td>+</td>
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<tr>
<td>- No further surgery, if incidental finding accompanies invasive or intraductal carcinoma</td>
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</tbody>
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* Terminal ductal-lobular unit


Allgemeines


LIN


**ADH**


**Papillome**

1. Brogi, E. & Krystel-Whittemore, M. Papillary neoplasms of the breast including upgrade rates and management of intraductal...


Statement: Pleomorphic lobular carcinoma in situ (PLCIS)

8. Kavesh, M., Martinez, M. & Asirvatham, J. R. Pleomorphic lobular carcinoma in situ composed of signet ring cells mimicking


**Statement: Florid lobular carcinoma in situ (FLCIS)**


**Statement: Lobular carcinoma in situ with microinvasion**


Strategy after Diagnosis of LIN / LCIS

<table>
<thead>
<tr>
<th>Oxford</th>
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<th>AGO</th>
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<tr>
<td>LIN / LCIS in core- / vacuum-assisted biopsy:</td>
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<tr>
<td>• No further measures if LIN (LCIS, classical variant) with involvement of ≤ 3 TDLU (terminal ductulo-lobular unit) in vacuum biopsy and concordant with imaging.</td>
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<tr>
<td>• Open excisional biopsy, with pleomorphic LIN, florid LIN (LIN 3), or LIN with comedo type necrosis or if not concordant with imaging findings.</td>
<td>2b</td>
<td>C</td>
<td>++</td>
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<tr>
<td>LIN / LCIS at margins of resection specimen (BCT):</td>
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<tr>
<td>• No further surgery.</td>
<td>2a</td>
<td>C</td>
<td>++</td>
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</tbody>
</table>

Exceptions:
- a) Pleomorphic, florid, or LIN / LCIS with necrosis
- b) Imaging abnormality is not removed

LIN in core- / vacuum-assisted biopsy (LoE 2b)

8. Racz, J. M., Carter, J. M. & Degnim, A. C. Lobular Neoplasia and Atypical Ductal Hyperplasia on Core Biopsy: Current Surgical


LIN accompanying intraductal or invasive carcinoma in patients with BCT (LoE 2a)


5. Khoury, M. E. et al. Is the outcome at surgery different when flat epithelial atypia and lobular neoplasia are found in association at biopsy? *Br J Radiology* 90, 20160750 (2017).


Papilloma

**Includes:** Central and peripheral papilloma > 2 mm, atypical intraductal papilloma (B3)
- **To be distinguished from** peripheral micropapilloma arising in the TDLU, size ≤ 2 mm, may be multiple
- To be distinguished from papilloma with DCIS, from intraductal papillary carcinoma, and from encapsulated papillary carcinoma
- **Precursor lesion:** May be associated with in-situ or invasive cancer (up to 6% without atypia if concordant imaging, up to 30% with atypia), increased ipsilateral risk for cancer (up to 4.6% and up to 13% in case of atypical papilloma).


Breast Cancer Early Detection: Follow-up Imaging for Women Age 50–69 Years with B3-Lesions

- **FEA, non-atypical papilloma, radial sclerosing lesion**
  - Screening mammography
  - **LoE 5**  
  - **GR C**  
  - **AGO ++**

- **LIN / LCIS**
  - Mammography (12 months)
  - **LoE 3a**  
  - **GR C**  
  - **AGO ++**

- **ADH**
  - Mammography (12 months)
  - **LoE 3a**  
  - **GR C**  
  - **AGO ++**
  - Women with LIN and ADH should be informed about their elevated risk of breast cancer


