

Persistent pain after breast cancer surgery

Prevalence and physical consequences

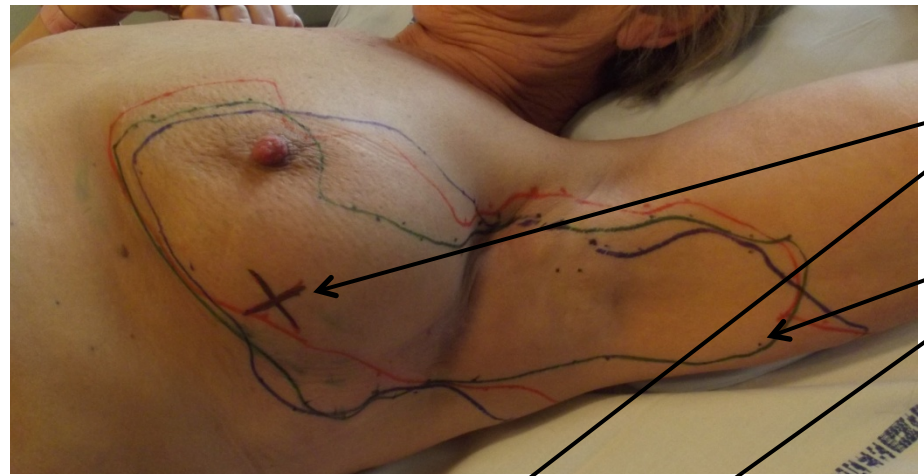
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Definition

Persistent pain after breast cancer surgery:

1. New or worse pain in the breast, side of chest, axilla or arm
2. more than 3 months after last treatment
3. when other causes such as recurrence have been ruled out

Clinical picture

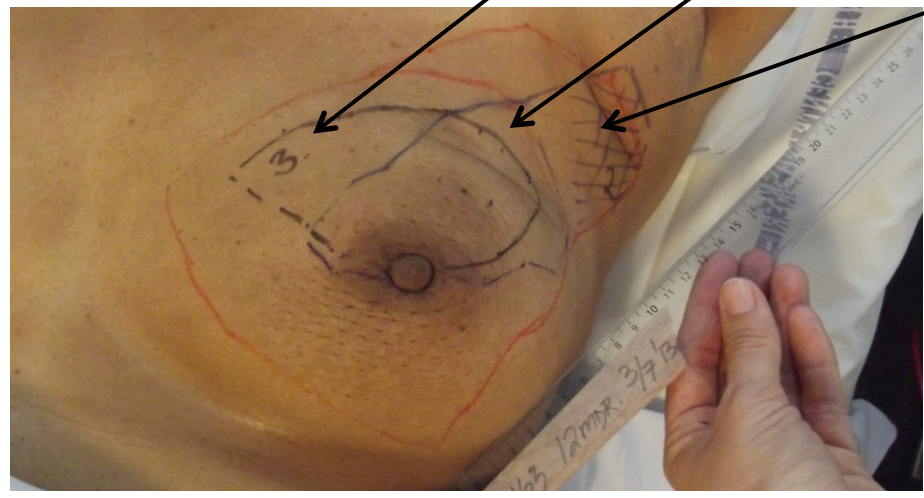


Distinct pain triggerpoint

Hypoesthesia

Allodynia for cold (25°C)

Pain during movement



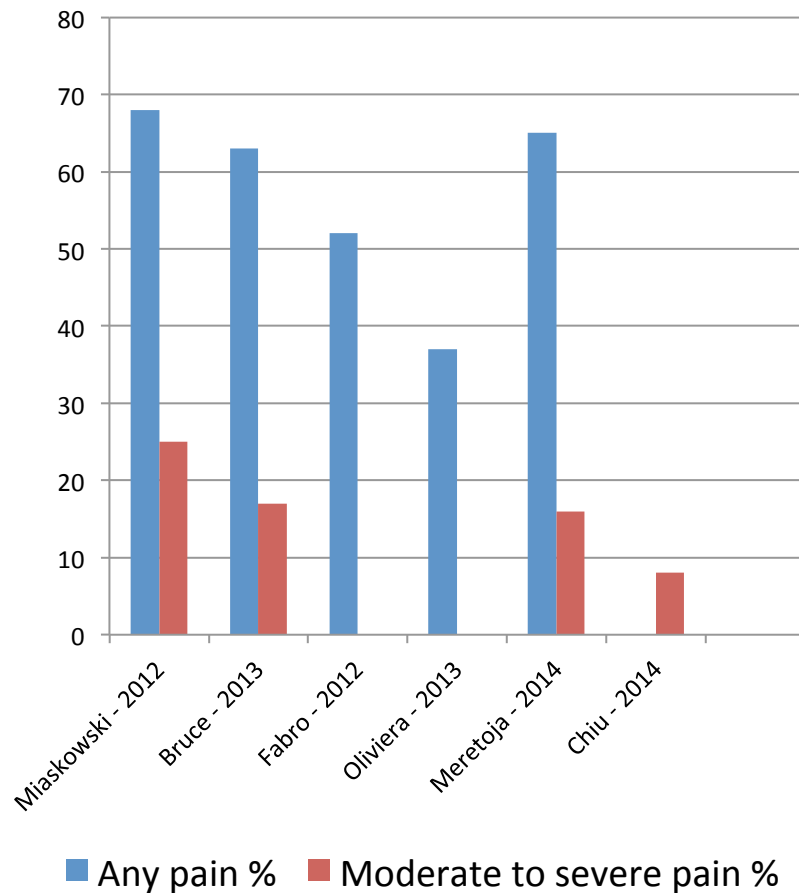
Prevalence of and Factors Associated With Persistent Pain Following Breast Cancer Surgery

Rune Gärtner, Maj-Britt Jensen, Jeanette Nielsen, Marianne Ewertz, Niels Kroman, Henrik Kehlet

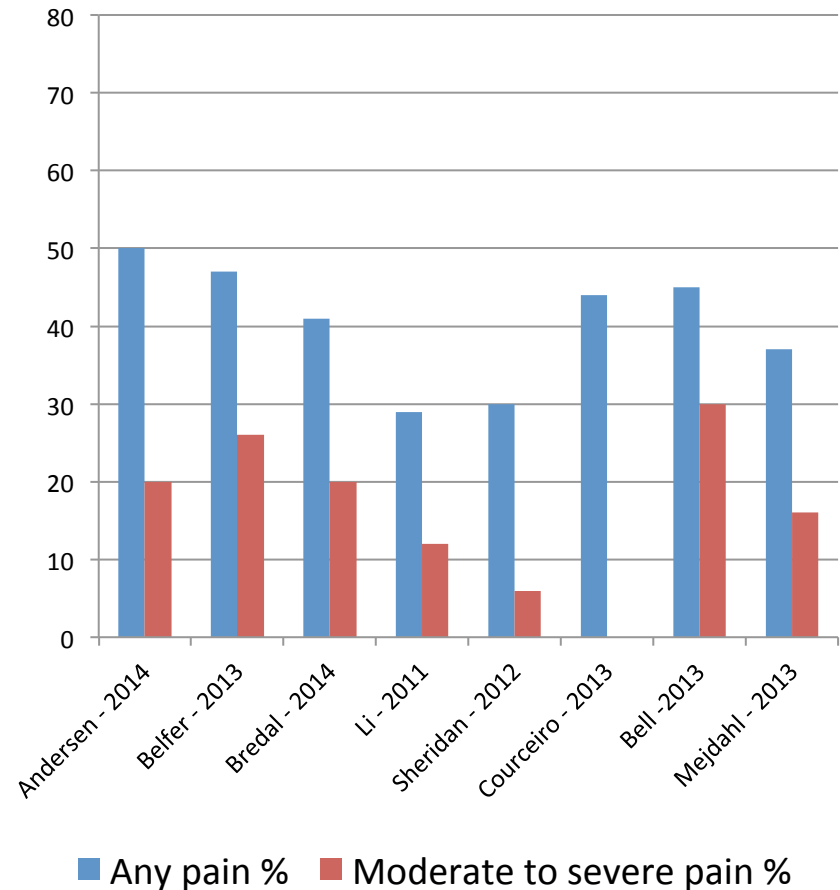
- n = 3,253
- 47% with pain, 20% moderate and 6% severe
- pain patients:
 - 65% with sensory disturbances
 - 28% used analgesics
 - 20% used other treatments
 - 20% GP contact for pain < 3 months

Recent studies on prevalence

Prospective studies 6-12 months



Cross-sectional studies 1-10 years





SEEK-B

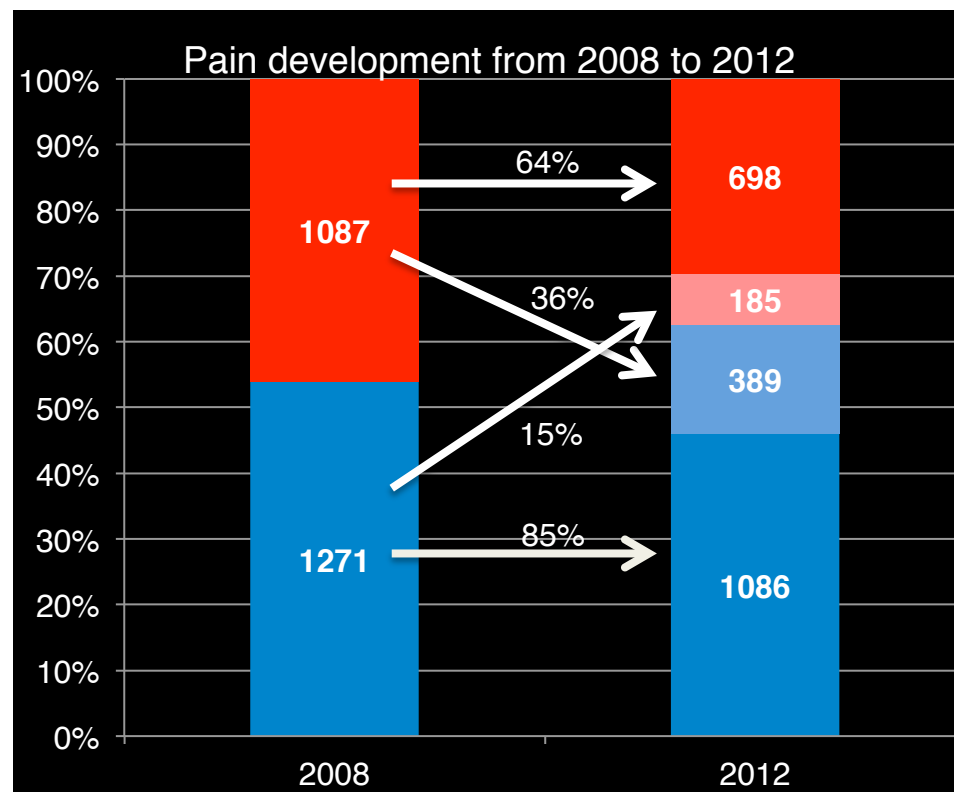
Senfølger
efter kræft i
brystet

Pain development in 537 patients

Persistent pain and sensory disturbances after treatment for breast cancer: six year nationwide follow-up study

Mathias Kvist Mejdahl *research assistant*¹, Kenneth Geving Andersen *physician research fellow*¹, Rune Gärtner *physician*², Niels Kroman *professor*², Henrik Kehlet *professor*¹

- Repeated cross sectional study (N=2411) (vs. Gärtner et al. JAMA 2009)
- PPBCS may progress or regress with time





SEEK-B

Senfølger
efter kræft i
brystet

Change in function from before surgery to one year after

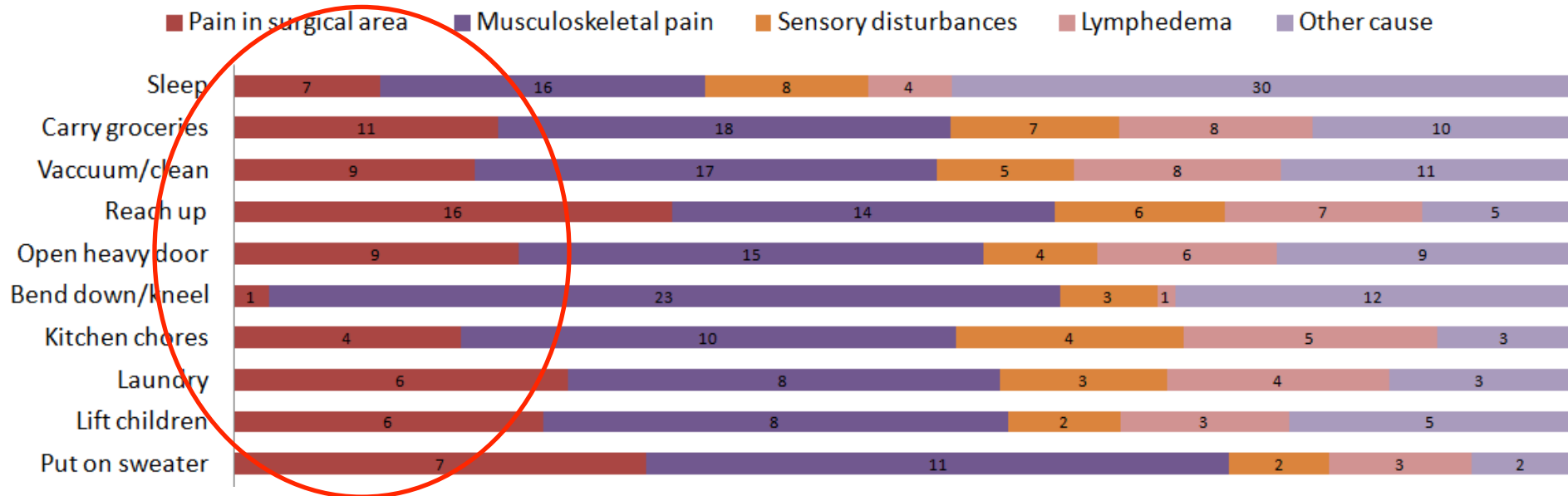


SEEK-B
Senfølger
efter kræft i
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Correlation NRS vs. activities with reduced function (baseline – 1 year)

Causes of reduced function

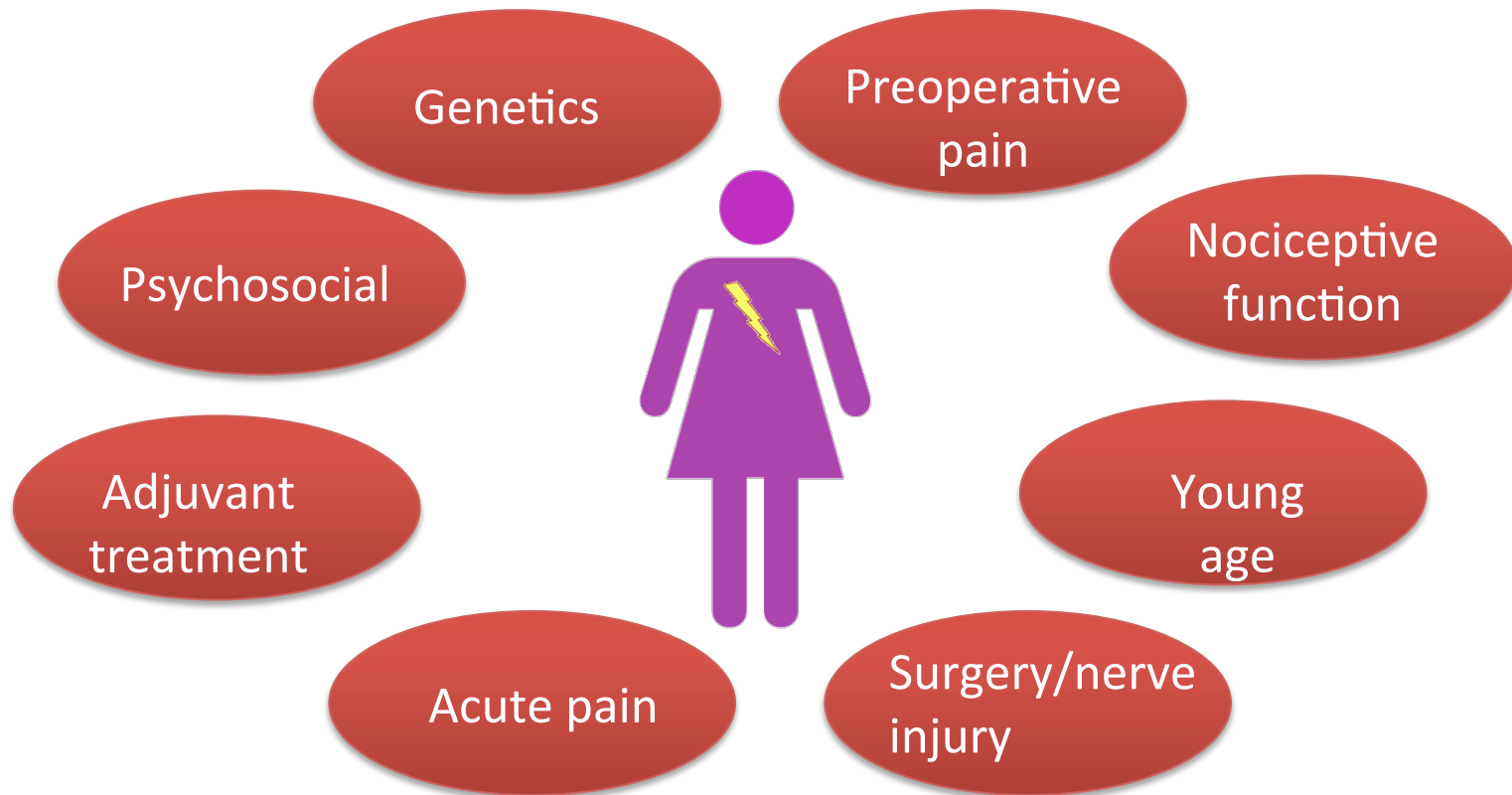
Percentages of patients with difficulties performing activities due to breast cancer sequelae



~ 20% have reduced physical function due to pain after surgery

Persistent Pain After Breast Cancer Treatment: A Critical Review of Risk Factors and Strategies for Prevention

Kenneth Geving Andersen^{*,†} and Henrik Kehlet^{*}

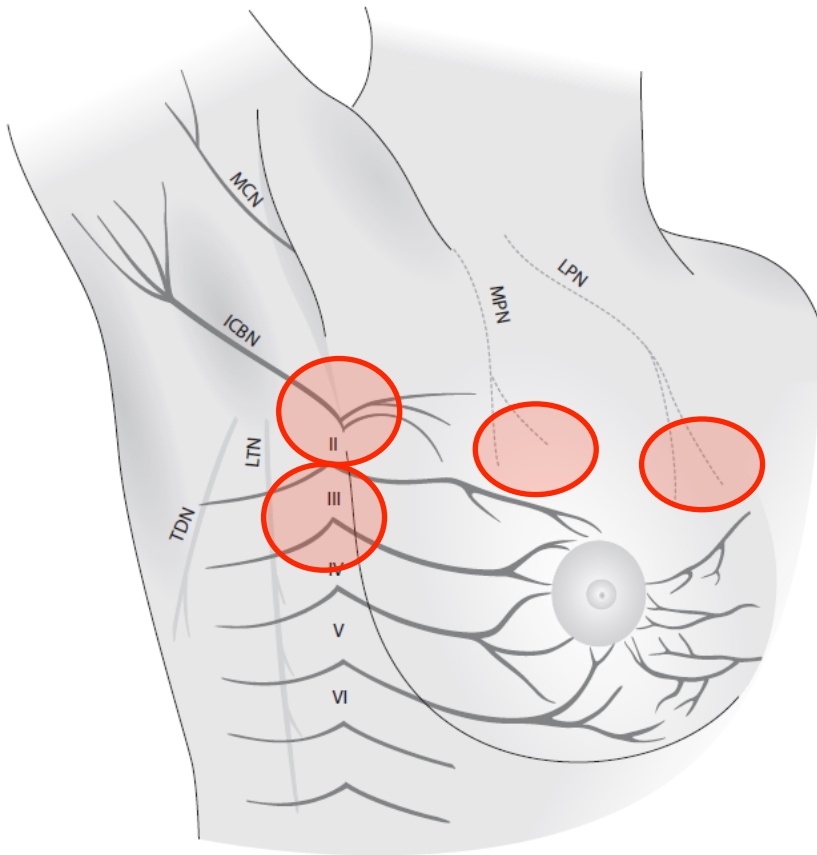


Treatment related risk factors

Surgery

Nerve damage

- Intercostobrachial nerve
 - Division causes higher prevalence of sensory disturbances
 - Relation to pain?



ICBN: intercostobrachial nerve

MPN: medial pectoral nerve

LPN: lateral pectoral nerve

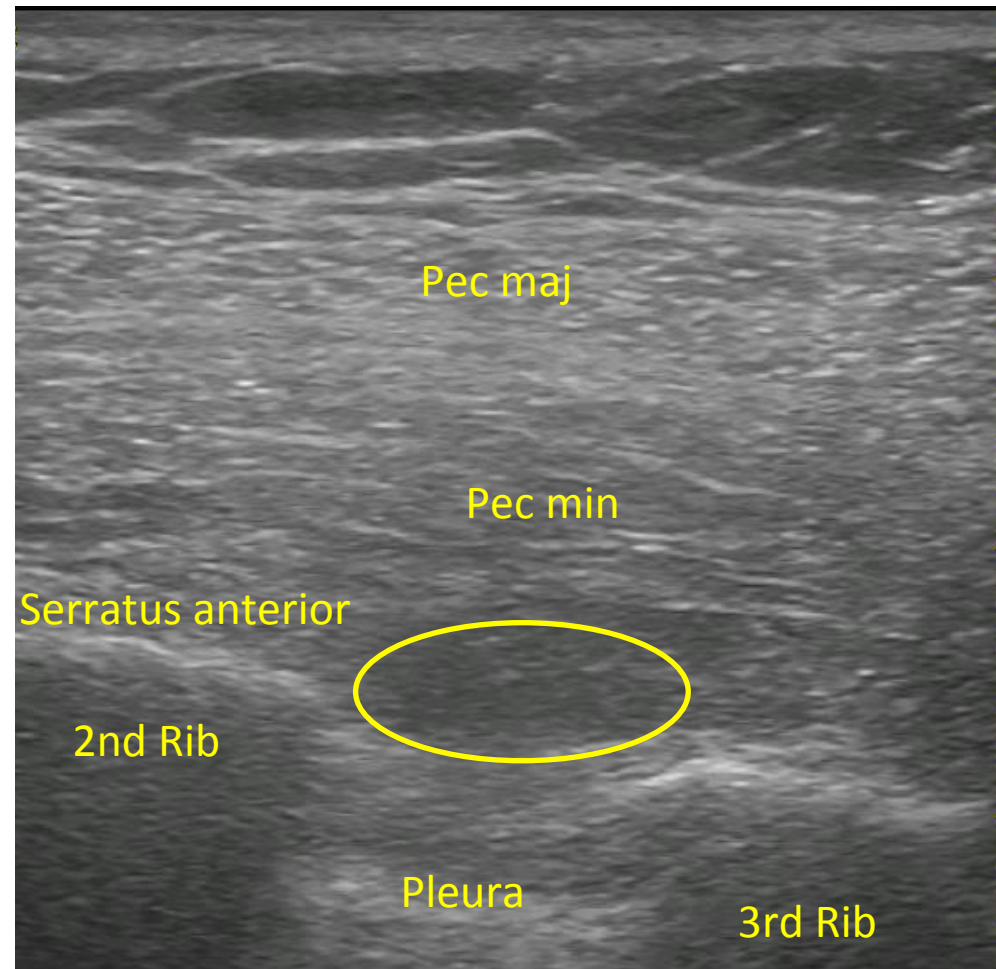
Bruce et al. PAIN 2013, Warriar et al. The Breast 2014
Andersen et al. in revision 2015

Neural Blockade for Persistent Pain After Breast Cancer Surgery

Nelun Wijayasinghe, MBBS, BSc, FRCA, Kenneth G. Andersen, MD, and Henrik Kehlet, MD, PhD

Neural blockade

- Sparse evidence
- RCT warranted



Summary

- High prevalence: 15-20% moderate-severe pain
- Dynamic state
- Treatment factors:
 - ALND, adjuvant treatment(?)
 - but not mastectomy or reconstruction
- Patient related factors:
 - Age
 - Pain reporting
 - Psychosocial
- Research needed on prevention / treatment