

ADH, Papillome, FEA et al. Wie gehen wir vor?

Prof. Dr. med. Christoph Rageth
Brust-Zentrum, 8008 Zürich
centre du sein, HUG, 1205 Genève
c.rageth@brust-zentrum.ch christoph.rageth@hcuge.ch

abbreviations

RS radial scar

FEA flat epithelial atypia

LN atypical lobular hyperplasia (incl. LCIS) (LN)
or atypical lobular hyperplasia LN2 = classical
LCIS or atypical lobular hyperplasia LN1=ALH

PT phyllodes tumor

PL papillary lesion

ADH atypical ductal hyperplasia (ADH)

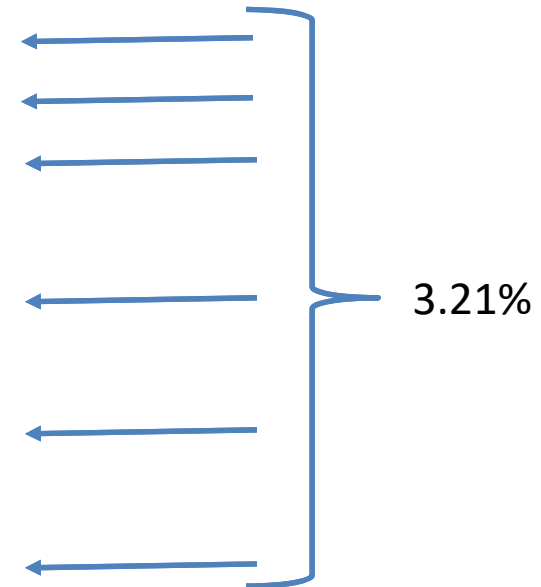
IC invasive cancer

Method of diagnosis

- Core needle biopsy
- Vacuum assisted biopsy
 - Stereotactic
 - Ultrasound guided
 - MR guided

CNB Zürich breast center 2001-2015

histology of CNB	n	%
benign	10'196	68.17
invasive cancer	3'550	23.74
inflammation	384	2.57
DCIS	262	1.75
Papilloma	220	1.47
LN	125	0.84
ADH	70	0.47
benign with "Atypia"	28	0.19
FEA	26	0.17
malignant Lymphoma	22	0.15
phyllodes tumor	19	0.13
not enough material	18	0.12
radial scar	19	0.13
M. Paget	11	0.07
sarcoma or malignant PT	6	0.04
total	14'956	100.00



B3 lesions

Analysis of the Swiss MIBB Database 2009-10/2015 (n=22'072)

B3 histologies (17%)

	n		n		n
ADH	736	PL, ADH, LN	2	PT	18
ADH, LN	30	PL, FEA	43	RS	317
FEA	773	PL, FEA, ADH	6	RS, ADH	8
FEA, ADH	110	PL, FEA, ADH, LN	1	RS, ADH, LN	2
FEA, ADH, LN	16	PL, FEA, LN	2	RS, FEA	13
FEA, LN	47	PL, LN	11	RS, FEA, ADH	2
FEA, PT	2	PL, RS	26	RS, FEA, LN	1
LN	546	PL, RS, ADH	3	RS, LN	11
PL	954	PL, RS, FEA	4		
PL, ADH	34	PL, RS, LN	1	total	3'719

«pure» B3 lesions

	n «pure» lesions	with entry in the field «recommendation»	with entry in the field «result of subsequent open surgery»
ADH	736	712	678
FEA	773	716	698
LN	546	522	504
PL	954	863	837
PT	18	17	16
RS	317	292	281
total	3'344	3'134	3'014

Recommendation of surveillance

	n	%
ADH	163	22.89
FEA	434	60.61
LN	266	50.96
PL	604	69.99
PT	9	52.94
RS	198	67.81

% with and w/o open surgery

	n	no open surgery	%	with open surgery	%
ADH	678	239	35.3	439	64.8
FEA	698	521	74.6	177	25.4
LN	504	313	62.1	191	37.9
PL	837	683	81.6	154	18.4
PT	16	13	81	3	19
RS	281	235	83.6	46	16.4
total	3'014	2'004	66.5	1'010	33.5

histology of open surgery ADH 1

histology of OS (open surgery)	n	%	n upgrade	% of total
ADH	156	23.01		
ADH; DCIS*	6	0.88	6	1.37
ADH; LN	3	0.44	3	0.68
ADH; LN; DCIS*	1	0.15	1	0.23
ADH; not indicated	1	0.15		
benign	106	15.63		
benign; ADH	1	0.15		
benign; FEA	1	0.15		
benign; other	1	0.15		
benign; PL	2	0.29		

histology of open surgery ADH 2

histology of OS (open surgery)	n	%	n upgrade	% of total
DCIS*	87	12.83	87	19.82
DCIS*; IC*	3	0.44	3	0.68
DCIS*; other	1	0.15	1	0.23
FEA	14	2.06		
FEA; ADH	4	0.59		
FEA; ADH; other	1	0.15		
FEA; DCIS*	1	0.15	1	0.23
FEA; DCIS*; IC*	1	0.15	1	0.23
FEA; LN	2	0.29		

histology of open surgery ADH 3

histology of OS (open surgery)	n	%	n upgrade	% of total
IC*	15	2.21	15	3.42
LN	21	3.1		
LN; IC*	2	0.29	2	0.46
LN; other	1	0.15		
PL	2	0.29		
PL; FEA; ADH	1	0.15		
PL; IC*	1	0.15	1	0.23
RS	3	0.44		
RS; FEA	1	0.15		

Summary of upgrades

	n	open surgery	n upgrade	% of total	% of open surgery cases only	DCIS	IC	% of IC among upgrades
ADH	678	439	121	18	28	99	22	18
FEA	698	177	35	5	20	19	16	46
LN	504	191	48	10	26	24	24	50
PL	837	154	12	1	8	8	4	33
PT	16	3	-	-	-	-	-	-
RS	281	46	5	2	11	4	1	20
total	3'014	1'010	221	7	11	155	67	30

REVIEW

First International Consensus Conference on lesions of uncertain malignant potential in the breast (B3 lesions)

Christoph J. Rageth^{1,2} · Elizabeth AM O'Flynn³ · Christopher Comstock⁴ ·
Claudia Kurtz⁵ · Rahel Kubik⁶ · Helmut Madjar⁷ · Domenico Lepori⁸ ·
Gert Kampmann⁹ · Alexander Munding¹⁰ · Astrid Baege¹ · Thomas Decker¹¹ ·
Stefanie Hosch¹ · Christoph Tausch¹ · Jean-François Delaloye¹² · Elisabeth Morris⁴ ·
Zsuzsanna Varga¹³

Received: 1 August 2016 / Accepted: 1 August 2016

© The Author(s) 2016. This article is published with open access at Springerlink.com

IBUS 2016, Zürich



	n votes				
which speciality are you coming from?	47	27 (57%) radiology	16 (34%) gynecology	2 (4%) pathology	2 (4%) surgery

IBUS 2016, Zürich



	n votes					
years of experience with breast imaging	49	15 (31%) >20y	16 (33%) 10-20y	11 (22%) 5-10y	6 (12%) <5y	1 (2%) no experience in breast imaging

IBUS 2016, Zürich



	n votes			
therapeutic indication of VAB in B3 lesions?	48	37 (77%) I think, that VAB should be used as a therapeutic option in certain B3 lesions	5 (10%) VAB should not be used as a therapeutic option in any B3 lesions	6 (13%) not sure

IBUS 2016, Zürich



Question No. 1

a diagnosis of a visible (on imaging by mammography or ultrasound) lesion by means of spring loaded core biopsy (14-18g) has been made

the lesion should not be removed

a visible lesion should be removed

Undecided

IBUS 2016, Zürich

Question No. 2

what method of excision should be chosen

VAB is acceptable

open biopsy
should be
preferred

undecided

IBUS 2016, Zürich

Question No. 3

a lesion has been removed by means of VAB and on imaging seems to be removed

an open re-excision should be performed

a repeat VAB should be performed

wait and see is justified

undecided

IBUS 2016, Zürich



	Core diagnosis			what method of excision			VAB diagnosis			
	the lesion should be removed	a visible lesion does not have to be removed	undecided	VAB is acceptable	open biopsy should be preferred	undecided	an open re-excision should be performed	a repeat VAB should be performed	wait and see is justified	undecided
FEA	36 (97.3%)	0 (0%)	1 (2.7%)	26 (70.3%)	10 (27%)	1 (2.7%)	1 (2.6%)	1 (2.6%)	36 (94.7%)	0 (0%)
RS	41 (85.4%)	4 (8.3%)	3 (6.3%)	33 (71.7%)	12 (26.1%)	1 (2.2%)	1 (2.1%)	0 (0%)	47 (97.9%)	0 (0%)
PL	40 (100%)	0 (0%)	0 (0%)	32 (84.2%)	4 (10.5%)	2 (5.3%)	4 (9.3%)	0 (0%)	39 (90.7%)	0 (0%)
PT	32 (91.4%)	1 (2.9%)	2 (5.7%)	19 (51.4%)	17 (45.9%)	1 (2.7%)	5 (12.2%)	1 (2.4%)	34 (82.9%)	1 (2.4%)
LN	32 (91.4%)	1 (2.9%)	2 (5.7%)	19 (57.6%)	14 (42.4%)	0 (0%)	5 (13.2%)	0 (0%)	33 (86.8%)	0 (0%)
ADH	46 (100%)	0 (0%)	0 (0%)	11 (24.4%)	33 (73.3%)	1 (2.2%)	23 (51.1%)	1 (2.2%)	19 (42.2%)	2 (4.4%)

IBUS 2016, Zürich



	Q1. Core diagnosis			Q2. what method of excision			Q3. VAB diagnosis			
	the lesion should be removed	a visible lesion does not have to be removed	undecided	VAB is acceptable	open biopsy should be preferred	undecided	an open re-excision should be performed	a repeat VAB should be performed	wait and see is justified	undecided
FEA	36 (97.3%)	0 (0%)	1 (2.7%)	26 (70.3%)	10 (27%)	1 (2.7%)	1 (2.6%)	1 (2.6%)	36 (94.7%)	0 (0%)
RS	41 (85.4%)	4 (8.3%)	3 (6.3%)	33 (71.7%)	12 (26.1%)	1 (2.2%)	1 (2.1%)	0 (0%)	47 (97.9%)	0 (0%)
PL	40 (100%)	0 (0%)	0 (0%)	32 (84.2%)	4 (10.5%)	2 (5.3%)	4 (9.3%)	0 (0%)	39 (90.7%)	0 (0%)
PT	32 (91.4%)	1 (2.9%)	2 (5.7%)	19 (51.4%)	17 (45.9%)	1 (2.7%)	5 (12.2%)	1 (2.4%)	34 (82.9%)	1 (2.4%)
LN	32 (91.4%)	1 (2.9%)	2 (5.7%)	19 (57.6%)	14 (42.4%)	0 (0%)	5 (13.2%)	0 (0%)	33 (86.8%)	0 (0%)
ADH	46 (100%)	0 (0%)	0 (0%)	11 (24.4%)	33 (73.3%)	1 (2.2%)	23 (51.1%)	1 (2.2%)	19 (42.2%)	2 (4.4%)

IBUS 2016, Zürich



	Q1. Core diagnosis			Q2. what method of excision			Q3. VAB diagnosis			
	the lesion should be removed	a visible lesion does not have to be removed	undecided	VAB is acceptable	open biopsy should be preferred	undecided	an open re-excision should be performed	a repeat VAB should be performed	wait and see is justified	undecided
FEA	36 (97.3%)	0 (0%)	1 (2.7%)	26 (70.3%)	10 (27%)	1 (2.7%)	1 (2.6%)	1 (2.6%)	36 (94.7%)	0 (0%)
RS	41 (85.4%)	4 (8.3%)	3 (6.3%)	33 (71.7%)	12 (26.1%)	1 (2.2%)	1 (2.1%)	0 (0%)	47 (97.9%)	0 (0%)
PL	40 (100%)	0 (0%)	0 (0%)	32 (84.2%)	4 (10.5%)	2 (5.3%)	4 (9.3%)	0 (0%)	39 (90.7%)	0 (0%)
PT	32 (91.4%)	1 (2.9%)	2 (5.7%)	19 (51.4%)	17 (45.9%)	1 (2.7%)	5 (12.2%)	1 (2.4%)	34 (82.9%)	1 (2.4%)
LN	32 (91.4%)	1 (2.9%)	2 (5.7%)	19 (57.6%)	14 (42.4%)	0 (0%)	5 (13.2%)	0 (0%)	33 (86.8%)	0 (0%)
ADH	46 (100%)	0 (0%)	0 (0%)	11 (24.4%)	33 (73.3%)	1 (2.2%)	23 (51.1%)	1 (2.2%)	19 (42.2%)	2 (4.4%)

IBUS 2016, Zürich



	Q1. Core diagnosis			Q2. what method of excision			Q3. VAB diagnosis - visible lesion has been removed			
	the lesion should be removed	a visible lesion does not have to be removed	undecided	VAB is acceptable	open biopsy should be preferred	undecided	an open re-excision should be performed	a repeat VAB should be performed	wait and see is justified	undecided
FEA	36 (97.3%)	0 (0%)	1 (2.7%)	26 (70.3%)	10 (27%)	1 (2.7%)	1 (2.6%)	1 (2.6%)	36 (94.7%)	0 (0%)
RS	41 (85.4%)	4 (8.3%)	3 (6.3%)	33 (71.7%)	12 (26.1%)	1 (2.2%)	1 (2.1%)	0 (0%)	47 (97.9%)	0 (0%)
PL	40 (100%)	0 (0%)	0 (0%)	32 (84.2%)	4 (10.5%)	2 (5.3%)	4 (9.3%)	0 (0%)	39 (90.7%)	0 (0%)
PT	32 (91.4%)	1 (2.9%)	2 (5.7%)	19 (51.4%)	17 (45.9%)	1 (2.7%)	5 (12.2%)	1 (2.4%)	34 (82.9%)	1 (2.4%)
LN	32 (91.4%)	1 (2.9%)	2 (5.7%)	19 (57.6%)	14 (42.4%)	0 (0%)	5 (13.2%)	0 (0%)	33 (86.8%)	0 (0%)
ADH	46 (100%)	0 (0%)	0 (0%)	11 (24.4%)	33 (73.3%)	1 (2.2%)	23 (51.1%)	1 (2.2%)	19 (42.2%)	2 (4.4%)

Management of risk lesions

IBUS 25.2.2006, 31.1.2010, 28.1.2012, 25.1.2014, 23.1.2016

Table 4 Consensus recommendations for the management of B3 lesions. *FEA* flat epithelial atypia, *RS* radial scar, *PL* papillary lesion, *PT* phyllodes tumor, *LN* classical lobular neoplasia, *ADH* atypical ductal hyperplasia, *VAB* Vacuum assisted biopsy, *OE* Open excision

	Diagnosis made by CNB	Diagnosis made by VAB
ADH	OE. VAB in unifocal ADH in small lesions could be justified	OE. If the lesion has been removed completely and only focal ADH with calcifications exists, surveillance could be justified
FEA	VAB or OE of visible lesion	surveillance is justified if the radiological lesion has been removed
LN ^a	OE or VAB (remove US-visible lesion)	OE. High risk follow-up if the radiological lesion has been removed
PL ^b	Remove larger or symptomatic (and especially peripheral)	Papillomas. VAB is Acceptable
PT	OE. Free margins in borderline and malignant PT's	Follow up in completely excised benign PT's surveillance is justified
RS	VAB or OE of visible lesion	surveillance is justified if the radiological lesion has been removed

^a *LN* only classical type. Pleomorphic *LN* should not be classified as B3 lesion. It is rather being treated like a high grade DCIS

^b *PL* with atypia: Such a lesion should not be classified as papilloma, but rather as *FEA* or *ADH* according to the type of atypia found