

Contents

Introduction	15
Structure and handling of the Diagnostic Primer	17
I Mammotome® Biopsy System	
Working Principles	19
Indications	19
Imaging modalities	19
Contraindications	19
Characteristics of the Mammotome® Biopsy System	20
Equipment	20
II Ultrasound-guided Vacuum-Assisted Breast Biopsy with Mammotome® EX	
Preparations for the procedure	24
Instruments	25
Setting up the equipment	26
Positioning the patient	26
Sterile draping	27
Positioning of the examiner	27
Nodal points	
1 Identifying the lesion	32
2 Disinfecting the skin and injecting the local anesthesia	34
3 Positioning the probe	36
4 Switching the Mammotome® EX to sample mode and taking the samples	38
5 Optional: Placing a biopsy site identifier (marker clip)	40
6 Removing the probe and checking the biopsy cavity with ultrasound	42
7 Closing and compressing the site	44
III Stereotactic-guided Vacuum-Assisted Breast Biopsy with Mammotome® ST	
Preparations for the procedure	46
Instruments	47
Setting up the equipment	48
Positioning the patient	49
Nodal points	
1 Identifying the lesion (performing the scout view at 0°)	54
2 Calculating the coordinates	56
a) Performing the stereotactic views (-15° and +15°) or a selected one ($\pm 15^\circ$)	56
b) Obtaining the coordinates and transmitting them to the stereotactic unit	58
3 Performing local anesthesia and inserting the probe	60
4 Confirming the correct position of the probe	62
a) Taking the pre-fire control images	62
b) Firing the probe and taking the post-fire control images	64
5 Switching the Mammotome® ST to sample mode and taking the samples	66
6 Checking the biopsy site and the samples with X-ray	68
7 Optional: Placing a biopsy site identifier (marker clip)	70
8 Removing the probe and checking the biopsy cavity	74
9 Compressing the site and closing the incision	76

IV MRI-guided Vacuum-Assisted Breast Biopsy with Mammotome® MR

Preparations for the procedure	78
Instruments	79
Setting up the equipment	80
Positioning the patient	83

Nodal points

1 Identifying the lesion	86
a) Taking the scout images (three planes) and the marker series	86
b) Taking the pre- and post-contrast images	88
2 Calculating the coordinates	90
3 Positioning and inserting the targeting set	92
4 Confirming the correct position of the targeting set	96
5 Inserting the probe and taking the samples	98
6 Optional: Removing the probe and checking the biopsy cavity	100
7 Optional: Placing a biopsy site identifier (marker clip)	102
8 Removing the probe and targeting set and checking the biopsy cavity	104
9 Closing and compressing the site	106

V Management of difficult situations, complications, and mistakes

1 Thin or small breast	109
2 Chest wall lesion	111
3 Subareolar or periareolar lesion	112
4 Superficial lesion	113
5 Imaging problems	115
6 Pain	116
7 Bleeding	116
8 Skin and organ injuries	116
9 Probe positioning problems	117
10 Hematoma	118
11 Infection	118
12 Discomfort and fainting	118
13 Absence of significant samples during the procedure	119

Appendices

Post-procedure patient follow-up	120
Pathological workup of samples	120
Documentation	121
Imaging-histology discordance	121
Bibliography	122
Keywords	125