

UT SOUTHWESTERN DEPARTMENT OF SURGERY

2013-2014 TECHNICAL SKILLS COURSE OUTLINE

Course title: Minimally Invasive Procedures of the Breast

Course director: Roshini Rao, MD

Specialty: Surgery

Additional course faculty: _____

Participants: PGY 2 Surgery residents

	# participants	
Curriculum dates:	for course:	12
	Percutaneous breast biopsy	<u>8/21/13</u>
	Breast ultrasound	<u>10/02/13</u>
	Breast balloon brachytherapy	<u>1/29/14</u>

Expected attendance:	12	
Sessions assigned to each trainee	<u>3</u>	
Duration of each session	<u>2</u>	hr(s)
Trainees per session	<u>13</u>	

Other assigned sessions:

Duration of each session	_____	hr(s)
Trainees per session	_____	
When other sessions are held?	_____	

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Course Completion Verification - How do you know when a trainee has completed each component of the course and the overall course itself? Please specify for each course component, if applicable – *for example, assigned reading component verified by written testing and skills component verified by attending 2 course-instructor led sessions.*

- Attendance based: based on trainee attending all of the designated sessions
- Entire course - course solely based on attendance
 - Part of course - attendance to designated sessions required in addition to other components listed below
- Repetition based: based on the trainee performing a specific number of repetitions
- Components: _____
- # of Repetitions: _____
- Proficiency based: based on the trainee performing a specified number of repetitions
- Components: **Fine Needle Aspiration:** Demonstrate ability to infiltrate local anesthesia, obtain aspirate, and thereafter place onto slides appropriately.
Core Biopsy: Vocalize understanding for rationale for core biopsy versus FNA, demonstrate appropriate anesthetic infiltration, obtain adequate core samples.
Partial breast irradiation: Vocalize understanding for rationale in utilizing balloon brachytherapy techniques for partial breast irradiation.
- Method for determining: Direct instructor observation of procedural steps with accompanying documentation of achievement.
- Written testing: based on passing a written test
- Components: _____
- Documentation of watching videos/CD's/web-based materials: based on proctor or instructor verification that the trainee has watched the specified materials
- Components: _____

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Other (*specify*): _____
Components: _____

Self-study or self-practice (Is self-study or self-practice an expectation of this course?)

- No
 Yes

Self-study component(s): Preview articles prior to session

Estimated time requirements for self-study: 1/2 hrs

Phase of course where self-study completed: Prior to course

Self-practice component(s):

Estimated time requirements for self-practice: _____ hrs

Phase of course where self-study completed: _____

Training Location(s): Skills Lab (E6.202)

Resources (Textbooks, CD-ROMs, Videos, etc):

Thomas Stavros "Breast Ultrasound."

Selected readings from ASBS ultrasound course

"Fine-Needle Aspiration: Techniques & Smear Preparation" by David Lieu for Percutaneous Biopsy Session.

Book chapters from Clinical Lab Med (2005) 631-654 "Breast Fine Needle Aspiration Biopsy: Prevailing Recommendations and Contemporary Practices" by Andrea Abati, MD and Aylin Simsir, MD for Ultrasound guided session.

Surgical Clinics of North America 84 (2004) 1001-1034 "Updates in Breast Ultrasound" by Richard E. Fine, MD and Edgar D. Staren, MD, PhD.

Journal Radiotherapy and Oncology (January 2009) 157-165 "Accelerated Partial Breast Irradiation Utilizing Balloon Brachytherapy Techniques" by Jonathan B. Strauss and Adam Dicker for Breast Brachytherapy.

Educational Scope:

- Skills
Components: Ability to perform FNA versus core biopsy versus Mammosite placement, performed with and without ultrasound guidance.

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- ☒ Cognitive
Components: Lectures given on each topic and information given in the form of book chapters.

- ☒ Judgment
Components: What clinical situations require the use of one biopsy technique versus another?

Learning Objectives:

Understand the indications and techniques for performance of FNA versus Core biopsy in palpable breast masses. Understand the indications and techniques for performance of ultrasound guided vacuum assisted core biopsy. Understand the current indications and techniques for breast Mammosite placement.

Summary of Curriculum, Teaching Methods, and Resource Utilization:

(For each component, please specify what material will be taught during each session, how will the material be taught, and what teaching materials will be used. Please also specify the overall format for the course including expectations required for successful course completion)

1st Session: Percutaneous biopsy of palpable mass using FNA or Core biopsy:

1. Handout of fine needle aspiration technique and core biopsy technique given 2 weeks prior to course
2. Twenty minute lecture with interactive questions
3. Turkey breast with green olives used as model (3 models per session, 3-4 students per model), Tru-cut biopsy needles, Mammotome biopsy needle
 - a. Performance of FNA and core biopsy by instructor
 - b. Individual students given opportunity to attempt biopsy
 - c. Final performance of one FNA and one core biopsy by each student with observation and assessment by instructor (see sheet)

2nd Session: Ultrasound guided vacuum assisted core biopsy

1. Handout describing basic breast ultrasound and vacuum assisted core biopsy given 2 weeks prior to course
 2. Twenty minute lecture with interactive questions
 3. Commercial breast phantoms used as model
 - a. Vacuum assisted core biopsy with ultrasound guidance demonstrated by instructor
 4. Performance of biopsy by each student with instructor assessment and evaluation

3rd Session: Balloon Brachytherapy Techniques

1. Handout of Balloon Brachytherapy Techniques given 2 weeks prior to course
2. Twenty minute lecture with interactive questions
3. Performance of technique by each student with instructor assessment and evaluation

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Methods for giving feedback to learners (Formative and Summative):

During the practice phase, instructor will provide feedback directly to students. Each student will receive a copy of the final evaluation given at the end of the session.

Methods of assessment of learners:

Assigned reading component verified by oral questioning during introductory session. The Skills component is verified by attendance, direct observation by instructor using evaluation checklist, and by objective evidence of appropriate tissue within biopsy taken.

Methods for remediation:

Based on final evaluation at end of every session, if there is a student who is unable to perform the technique and obtain appropriate tissue, a second session with one on one instruction will be arranged.

Methods of course evaluation:

Post-test questionnaires completed by trainees at the end of the course and faculty evaluations of skills sessions

Materials:

Automated core biopsy devices	3
Phantom breast phantoms (w/ simulated masses)	2
Mammotome vacuum (assisted biopsy devices)	2
Ultrasound machines	3
Commercial breast phantoms	3
Butterfly needles and syringes	12
Mammosite balloons	3
Latex-gloves	1 box
Pap & formalin fixatives	
11 blade knives	3
12 cc syringes	3