

SUNY DOWNSTATE MEDICAL CENTER
UNIVERSITY HOSPITAL OF BROOKLYN
POLICY AND PROCEDURE

No: RAD 33
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Subject: RADIOLOGICAL EXAMINATIONS OF BARIATRIC PATIENTS

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Related Policies No. RAD-6

Issued by: Radiology Department

I. PURPOSE

To provide appropriate, effective radiological examinations for morbidly obese patients while ensuring patient and staff safety.

II. DEFINITIONS

Morbid Obesity: An individual is morbidly obese if she/he is 100 pounds over their ideal body weight with a BMI of 40 or more; or a BMI of 35 or more with significant medical problems caused by or made worse by their weight.

Bariatric Equipment: equipment and supplies designed for obese patients.

II. RESPONSIBILITIES

All Radiologic Technologists, Radiology Attending Physicians, Residents, Physician Assistants, Nursing Staff and Transport staff.

III. POLICY

In-house transportation of morbidly obese patients to the Department of Radiology is planned and coordinated with all involved disciplines to allow assessment of patient needs, equipment capacity and timely provision of services with minimal wait time once in the department. To ensure optimal safety, morbidly obese patients shall receive the same priority as critically ill patients.

IV. PROCEDURES/GUIDELINES

- A. All imaging study orders require the entry of height and weight information into the electronic medical record.
- B. Upon receipt of the order, the radiology resident shall protocol the study, review the height, weight, and BMI entries, and determine whether the patient fulfills the criteria for morbidly obese.
- C. If the patient is morbidly obese, the radiology resident will contact the ordering resident/PA to ascertain the following:
 - a. The type of physiologic monitoring required for patient transport
 - b. Identify all personnel required during patient transport
 - c. Abdominal girth measurement to determine if the gantry size (bore) can accommodate the patient (only required for CT and MR studies)
- D. Once the radiology resident protocols the study, s/he will document the answers obtained to all questions in section C in the "comment" section of RIS
- E. Based on the study ordered, it will be determined if the in-house equipment can accommodate the patient, and which machines is the most suitable. See attachment #1.
- F. The technologist will contact the patient's unit and communicate the following information to the patient's nurse:
 - Patient's Name/DOB/ MRN#
 - Type of exam scheduled
 - Location and room # of where the study will occur
 - Scheduled examination time

Note: Because of the increased risks associated with protracted wait times and lying in a supine position, bariatric patients will be prioritized and scanned as soon as they arrive in the department.

G. Transporting Bariatric Patients

1. Technologist shall be responsible for conducting a “pre-transportation confirmation” to notify nursing of the patient’s scheduled appointment time, to minimize the waiting time in Radiology.
2. Nursing is responsible for arranging transportation and coordination of personnel.
3. The nurse shall determine the level of physical assistance required to transfer the patient to a stretcher.
 - If a patient **requires moderate assistance or more**, use a bariatric Hoyer lift
 - If **less than moderate assistance is required**, a slide board can be substituted
 - The appropriate number of personnel as dictated by the individual patient needs should be present to ensure patient and staff safety
4. Morbidly obese patients are assigned priority once in the respective modality area within Radiology, and the study shall not be postponed to accommodate another patient. The technologist will maintain an open exam table pending patient’s scheduled arrival time.
5. Morbidly obese patients should not lie supine while waiting for the study (other than as indicated by the requirements of the radiologic study). The head of the stretcher should be elevated at least 30°.

Imaging Bariatric Patients

1. Obtaining diagnostic quality images on bariatric patients is extremely challenging resulting from artifacts which frequently degrade the images. Therefore the study must be reviewed by a radiology attending and deemed adequate for diagnostic interpretation, before removing the patient from the machine/exam table. This will prevent the need to perform multiple patient transfers if the study images are deemed suboptimal.
2. After the radiology attending approves the images, the patient will be removed from the exam table and immediately transported back to the nursing unit.

Note: See attachment #2, “Flow Chart for Ordering Transport and Imaging of Bariatric Patients”

ATTACHMENTS

Attachment 1 Equipment Weight Limits for Imaging Bariatric Patients
 Attachment 2 Flow Chart for Ordering Transporting and Imaging Bariatric Patients

VII. REFERENCES

- BARIATRIC CT Imaging: Challenges and Solutions. *Imaging Physics* 2015;36: 1076-1086
- *Joint Commission Standards*
- *UHB Policy RAD-6 Radiology Patient Safety*
- Impact of Obesity on Medical Imaging and Image-Guided Intervention. *AJR* 2007; 188:433-440.
- "Safe Bariatric Patient Handling Toolkit." VA Sunshine Healthcare Network.
<http://www.visn8.va.gov/patientsafetycenter/safePtHandling/toolkitBariatrics.asp>.
 Retrieved: Septemeber 28, 2016.

Date Review	Revision Required (Check One)		Responsible Staff Names and Title
	Yes	No	
8/2016	Yes	No	Vincent Monte, Assoc. Dir. Radiology Department
10/2018		No	Vincent monte, Assc, Director Radiology
	Yes	No	
	Yes	No	

Attachment 1: Weight Capacity for Radiology Imaging Equipment

EQUIPMENT	TABLE WEIGHT LIMIT (lbs)	DIMENSIONS	AVAILABLE AREA TO ACCOMMODATE PATIENT	EQUIPMENT LOCATION
US				
204 Ritter by MidMard Tables	500	Table width: 28.5"	28.5" Table width	Main MRI Suite 1 st fl. Rm.1-M100
Ritter 75 Evolution Tables	300	Table width: 27"	27" Table width	Ultrasound Dept. 4 th fl. RM.A4-449
CT				
Phillips Brilliance 64 slice	450	Gantry opening: 27.5" Table width: 16"	24" when table moved into gantry	Radiology 1st floor Rm 1-M100
Phillips Brilliance 64 slice (2nd floor)	600	Gantry opening: 27.5" Table width: 16"	24" when table moved into gantry	Radiology 2 nd floor Rm A2-551
Phillips Big Bore 16 slice	450	Gantry opening: 33.4" Table width: 18"	30" when table moved into gantry	Oncology Dept. RM LL2-109 Sub-basement
Interventional				
Phillips	550 static; 390 moving	Table width 27"	24"-clearance table top to intensifier	Radiology 2 nd floor Rm A2-601
Phillips	550 static; 390 moving	Table width 27"	24" -clearance table top to intensifier	Radiology 2 nd floor Rm A2-654
Nuclear Medicine				
Phillips	450	Table width 14"	22" when camera placed over table	Radiology 2 nd fl. Rm. A2-623
Phillips	500	Table width 14"	22" when camera placed over table	Radiology 2 nd fl. Rm. A2-648
X-RAY				
R&F Rooms # 4 & 5	375 static; 390 moving	Table width 27"	Variable – 40"-50" clearance table top to collimator Housing	Radiology 2 nd fl. Rm.(4) A2-642 & RM. (5) A2-646
RM 2	650lbs	Table width 27"	Variable clearance Table top to collimator Housing 21.5" -33.5"	Radiology 2 nd FL RM (2) A2-640

RADIOLOGIC STUDIES ON BARIATRIC PATIENTS

MRI				
GE Optima 450w	500lbs	Gantry opening:70cm	Variable depending on Coil utilized	Radiology 1 st floor RM 1-100

Imaging Bariatric Patients Workflow

