

1. MR Defecography Protocol

Divided into basic/required protocol and optional sequences that may be added depending upon indication or preferences of center.

a. Tips

- i. Pre-procedure patient education very important – some centers send patient an information sheet or share website – (e.g-radiologyinfo.org)
- ii. Cine imaging during defecation must be acquired with at least 3 attempts.
- iii. 100-120 ml of rectal gel with exception of obstructed defecation patients who may need larger volume to induce sensation of fullness. 40 ml of intra vaginal gel-optional.
- iv. Patient positioning – supine with knees bent – place pillow or wedge under knees for comfort and to help defecation.
- v. Patient coaching is very important. May need to do trial with the patient to make sure they understand Kegel/squeeze and defecation/strain.

b. See next page for Table w/ Defecography protocol

Required sequences	Anatomic	2D T2 TSE/FSE	Sagittal	Rest
	Anatomic	2D T2 TSE/FSE	Axial	Rest
	Anatomic	2D T2 TSE/FSE	Coronal	Rest
	Functional	Cine TrueFISP/FIESTA/BFFE#	*Sagittal midline	Kegel
	Functional	Cine TrueFISP/FIESTA/BFFE#	*Sagittal midline	Defecation (at least x3)
	Functional	Cine TrueFISP/FIESTA/BFFE#	*Sagittal midline	**Post def Valsalva
Strongly recommended in cases of posterior dysfunction	Anatomic	High Res T2 TSE through sphincters	Axial oblique	Rest
May replace 2D T2 with this	Anatomic	3D T2 TSE/FSE	Sagittal	Rest
	Anatomic	T1 GRE	Axial	Rest
Optional	Functional	TrueFISP/FIESTA/BFFE#	Coronal anterior to posterior abd wall	Valsalva after defecation
Optional	Functional	Cine TrueFISP/FIESTA/BFFE#	Straight Ax or Ax oblique through lev hiatus	Valsalva after defecation
Optional	Functional	Cine TrueFISP/FIESTA/BFFE#	Cor oblique through anal canal	Valsalva after defecation

TRUEFISP/FIESTA/BFFE is recommended for cine imaging, can use SSFSE/HASTE if preferred.

* Single midline Sagittal image usually satisfactory for cine imaging, can add additional images on either side of midline while maintaining temporal resolution in case patient shifts while on table.

** Can perform prior to placing rectal gel if workflow allows

