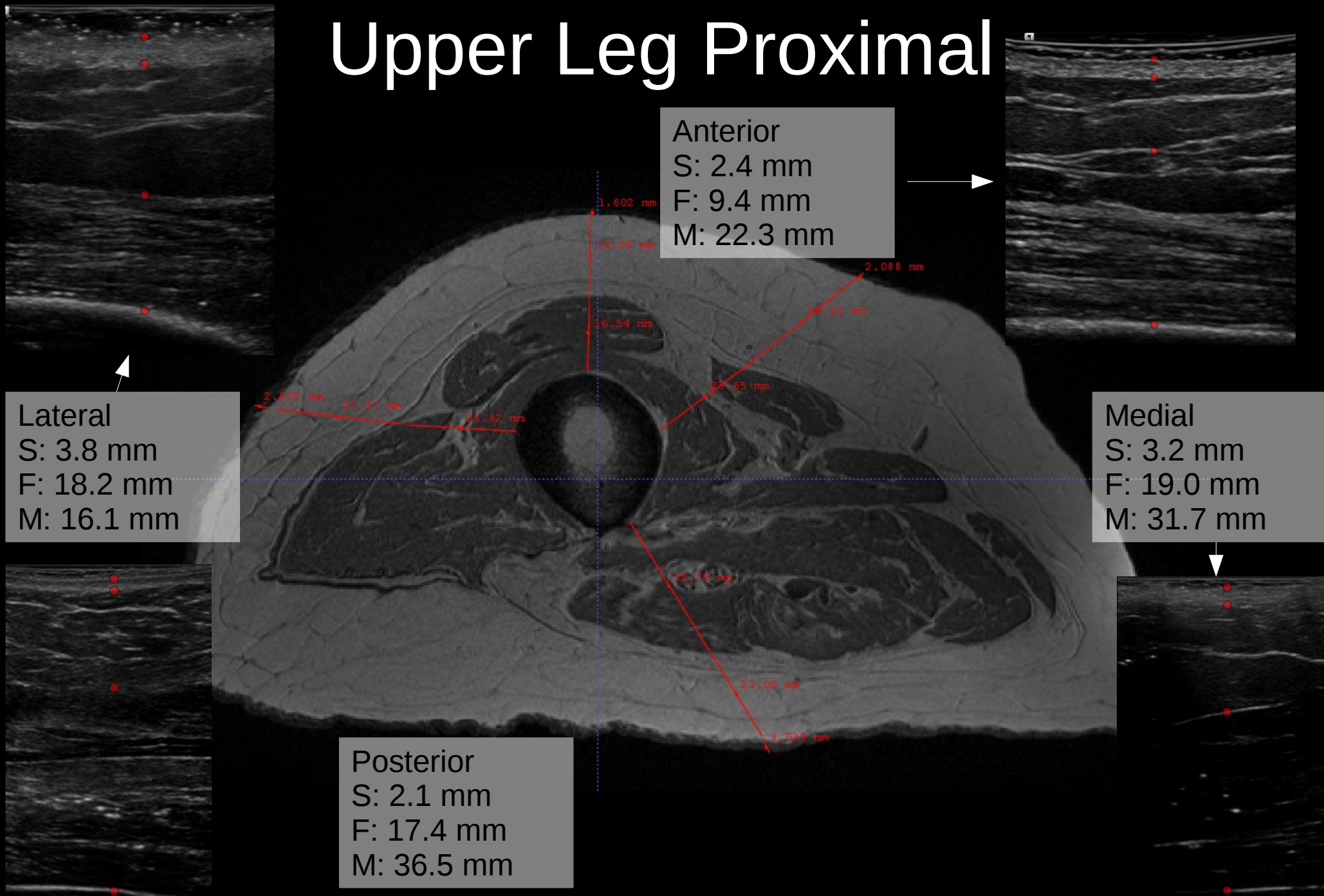


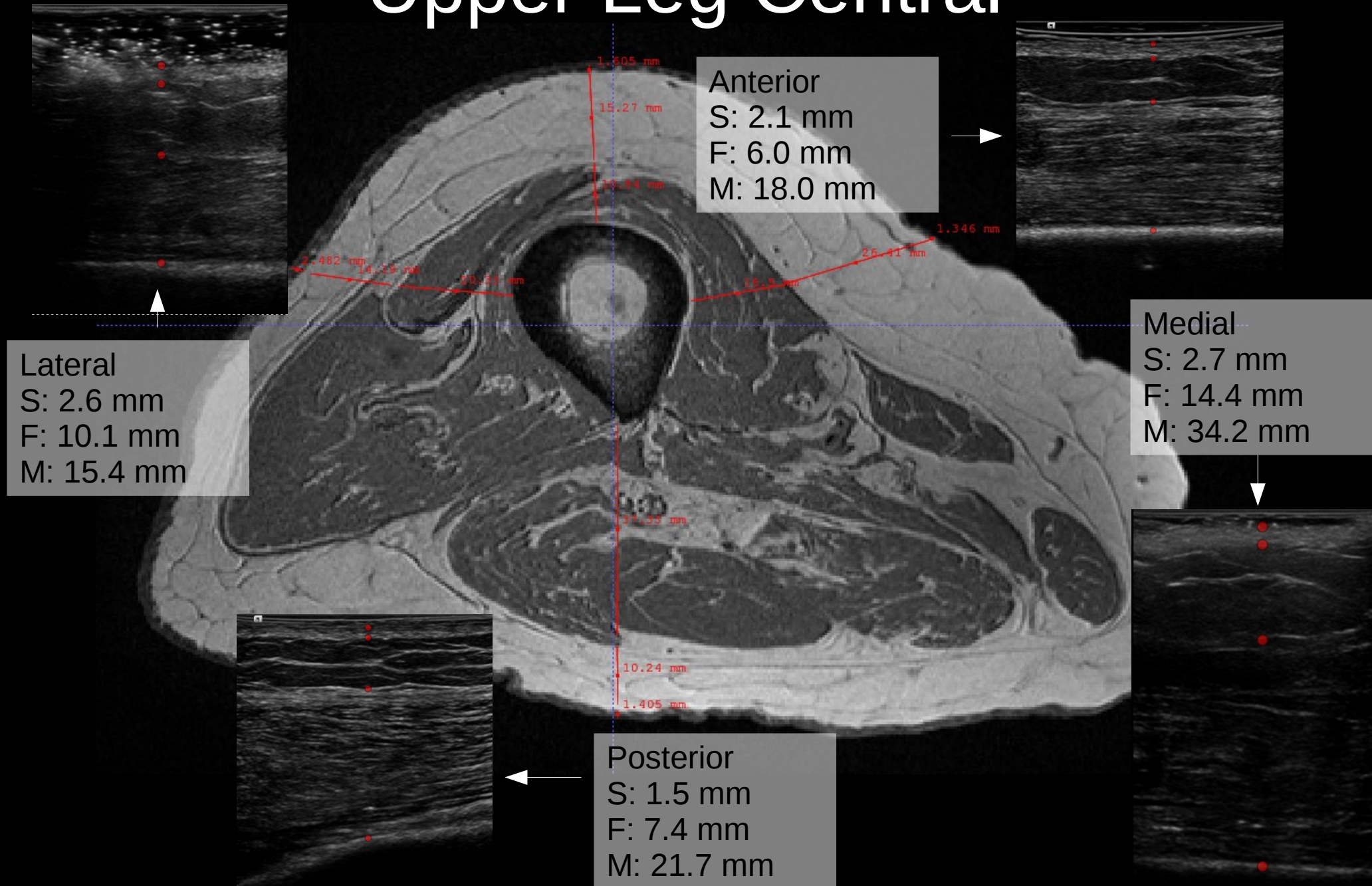
Comparison of MRI and Ultrasound

- Ultrasound MULTIS_C_008-1
 - Analyzed with manual thickness program
- MRI 11/30/2016
 - AX t1_2MMSlice_1mmgap_upper_femur2 (20 of 50)
 - AX t1_2MMSlice_1mmgap_mid_femur3 (40 of 50 & 10 of 50)
- MRI 11/1/2016
 - AX t1_2mmSlice_1mmgap_upper_tibia (5 of 50)
 - AX t1_2mmSlice_2mmgap_mid_tibia (25 of 50)
- AX t1_2mmSlice_1mmgap_lower_tibia1 (35 of 50)
 - Used approximate locations of where US images were taken
 - Used ITKSnap to manually measure skin, fat, and muscle layer thicknesses

Upper Leg Proximal



Upper Leg Central



Lateral
S: 2.2 mm
F: 6.6 mm
M: 20.5 mm

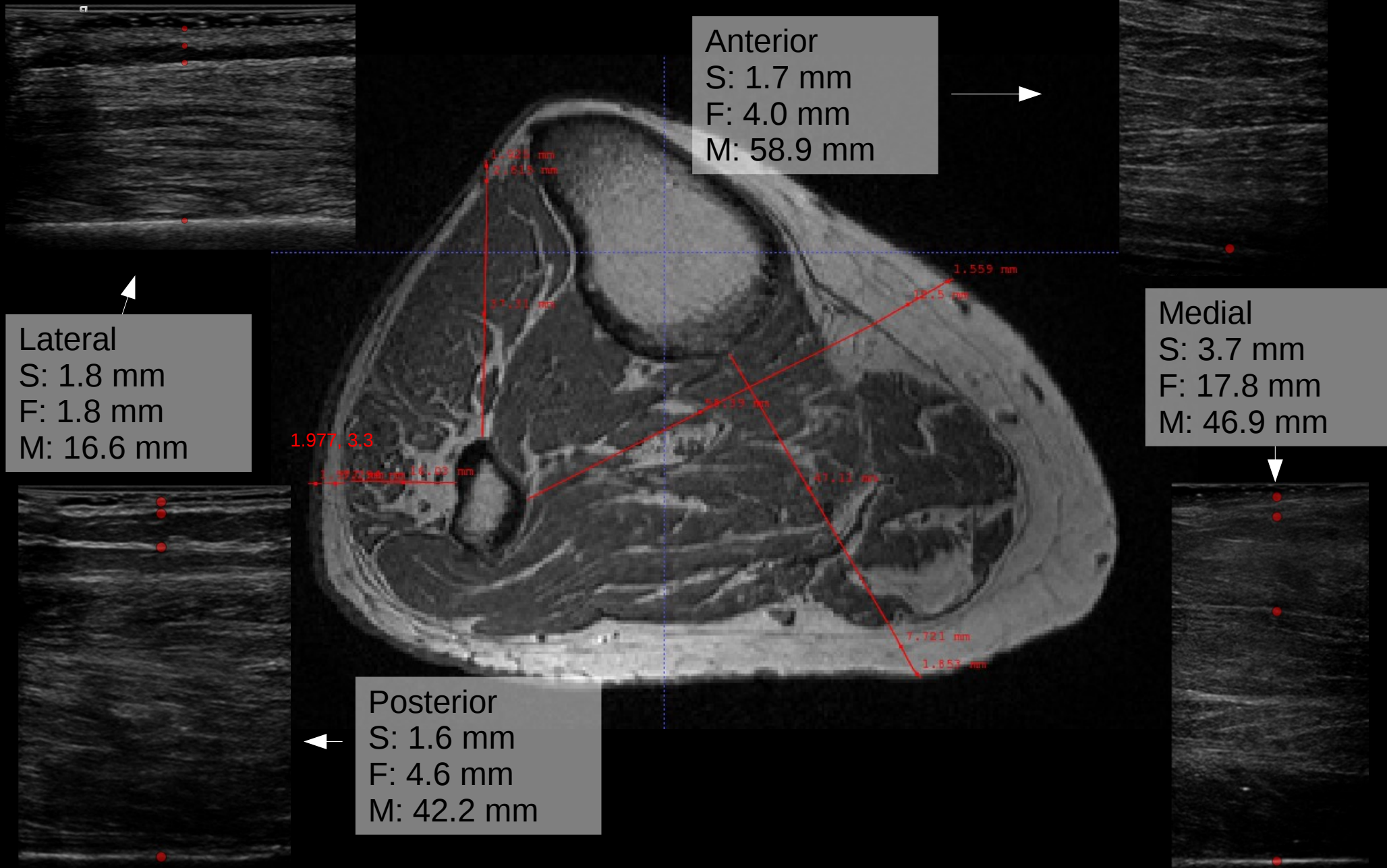
Anterior
S: 2.3 mm
F: 4.6 mm
M: 23.5 mm

Medial
S: 2.0 mm
F: 13.5 mm
M: 21.7 mm

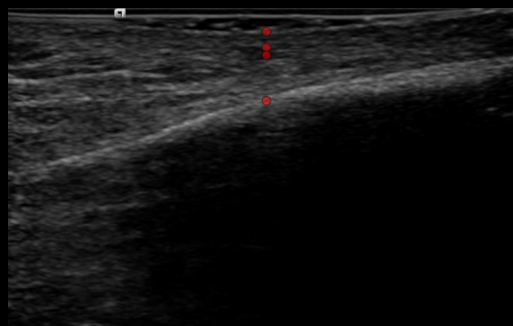
Posterior
S: 1.3 mm
F: 5.3 mm
M: 29.1 mm

Anterior
S: 2.3 mm
F: 4.6 mm
M: 23.5 mm

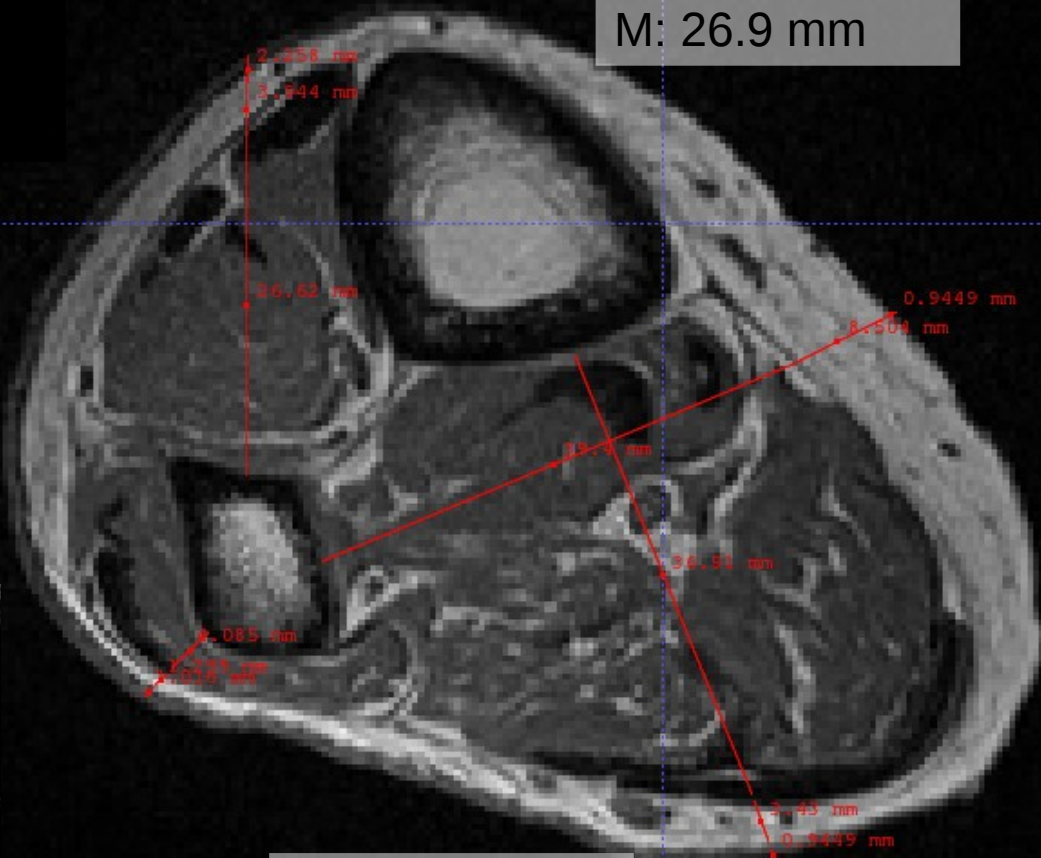
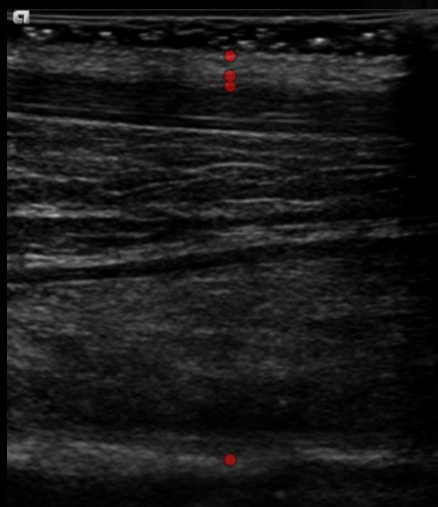
Lower Leg Proximal



Lower Leg Distal

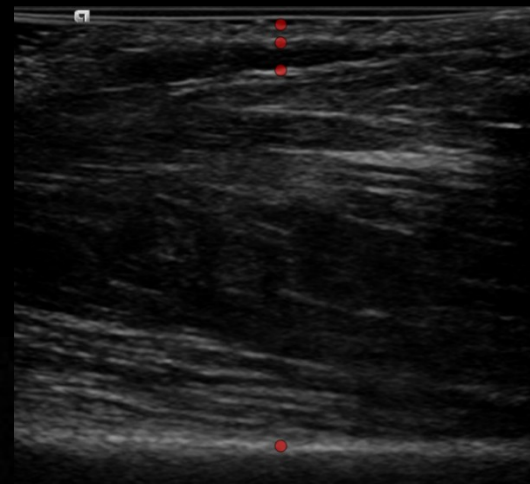


Lateral
S: 1.1 mm
F: 0.6 mm
M: 3.3 mm

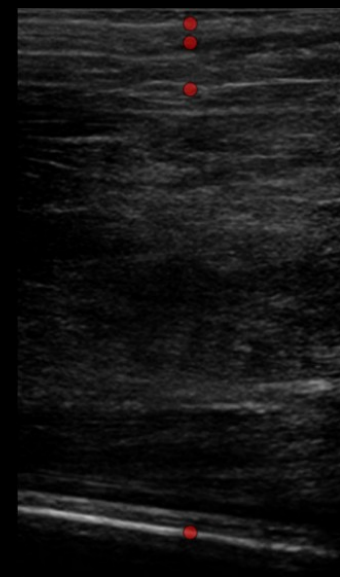


Posterior
S: 1.7 mm
F: 0.9 mm
M: 31.9 mm

Anterior
S: 1.3 mm
F: 2.0 mm
M: 26.9 mm



Medial
S: 2.1 mm
F: 5.3 mm
M: 50.1 mm



Total Thickness Difference

	UL_P			UL_C			UL_D		
	MRI	US	diff	MRI	US	diff	MRI	US	diff
Anterior	34.2	34.1	0.1	27.7	26.1	1.6	31	30.4	0.6
Medial	54.7	53.9	0.8	44.2	51.3	-7.1	31.5	37.2	-5.7
Posterior	56.8	56	0.8	48.9	30.6	18.3	51.2	35.7	15.5
Lateral	54	38.1	15.9	37	28.1	8.9	34.8	29.3	5.5

	LL_P			LL_C			LL_D		
	MRI	US	diff	MRI	US	diff	MRI	US	diff
Anterior	41.8	64.6	-22.8	40.5	58.4	-17.9	33.1	30.2	2.9
Medial	72.5	68.4	4.1	68.6	57.9	10.7	46.8	57.5	-10.7
Posterior	56.4	48.4	8	49.8	46.4	3.4	41.2	34.5	6.7
Lateral	21.3	20.2	1.1	22.2	16	6.2	6.4	5	1.4