

On-Line Table 1: SNR measurements (quantitative phantom)		
Sequence	Acceleration	SNR
Sag T1WI	Original sequence	68.2
	2 Averages	65.6
	1 Average	64.8
	Acc 2	56.9
	Acc 3	43.5
Sag T2WI	Original sequence	131.8
	1 Average	112.1
	Acc 2	104
	Acc 3	55.6
	Acc 4	38.5
Sag T2TIRM	Original sequence	157.5
	Acc 2	78.9
	Acc 3	38.4
	Acc 4	24.4
	Original sequence	290.8
Ax T2* GRE	Acc 2	224.9
	Acc 3	156.1
	Acc 4	32.6

Note:—Acc indicates acceleration factor; Ax, axial; Sag, sagittal.

Online Table 2: NU measurements (qualitative volunteers)			
Sequence	Acceleration	NU	Difference from Original Sequence ($P < .05$) ^a
Sag T1WI	Original sequence	6.52	
	2 Averages	7.98	.914
	1 Average	13.26	.017 ^a
	Acc 2	13.85	.009 ^a
	Acc 3	17.40	.001 ^a
Sag T2WI	Original sequence	11.61	
	1 Average	14.41	.014 ^a
	Acc 2	13.31	.181
	Acc 3	16.20	.001 ^a
Sag T2TIRM	Original sequence	11.59	
	Acc 2	13.05	.072
	Acc 3	14.17	.002 ^a
Ax T2* GRE	Original sequence	8.30	
	Acc 2	8.58	.716
	Acc 3	9.30	.044 ^a

Note:—Acc indicates acceleration factor; Ax, axial; Sag, sagittal.

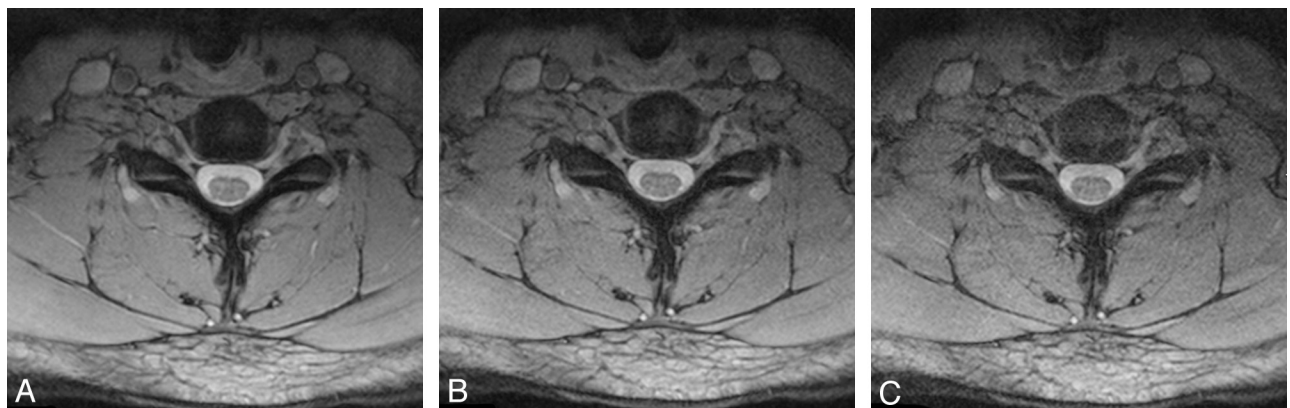
^aSignificant.

On-Line Table 3: Percentage of problematic ratings (quantitative volunteers)				
Sequence	Acceleration	Frequency (total)	%	Excluded (x)
Sag T1WI	2 Averages	2	0.9	
	1 Average	1	0.5	
	Acc 2	3	1.4	
	Acc 2	2	0.9	
	Acc 3	39	18.1	x
Sag T2WI	1 average	1	0.5	
	Acc 2	7	3.2	
	Acc 2	5	2.3	
	Acc 3	14	6.5	
	Acc 3	8	3.7	
Sag T2TIRM	Acc 2	22	10.2	
	Acc 3	33	15.3	x
	Acc 3	0	0.0	
Ax T2* GRE	Acc 2	0	0.0	
	Acc 3	0	0.0	
	Acc 3	1	0.5	

Note:—Acc indicates acceleration factor; Ax, axial; Sag, sagittal.

On-Line Table 4: Pathologies missed in the accelerated sequences compared with the original sequence (quantitative patients)				
Sequence	Acceleration	Pathologies: Missed; Total	%	Excluded (x)
Sag T1WI	2 Averages	14	4.9	
	1 Average	22	7.8	
	Acc 2	18	6.4	
	Acc 3	65	23.0	x
Sag T2WI	1 Average	27	6.1	
	Acc 2	4	1.2	
	Acc 3	14	4.2	
Sag T2TIRM	Acc 2	20	6.8	
	Acc 3	24	8.1	
Ax T2* GRE	Acc 2	19	10.2	
	Acc 3	33	17.7	x

Note:—Acc indicates acceleration factor; Ax, axial; Sag, sagittal.



On-Line Fig 1. Axial T2* GRE sequences (30-year-old male volunteer). A, T2* GRE, original sequence. B, Acceleration factor 2. C, Acceleration factor 3.