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Online Appendix

Methods:

The kappa statistic was used to calculate the interobserver reliability among the three radiologists and to calculate the intraobserver reproducibility between the two viewing sessions. The kappa statistic is used to evaluate agreement between observations using classification systems and accounts for agreement occurring by chance. It was interpreted according to the following criteria: 0.81 to 1.00, excellent agreement; 0.61 to 0.80, good agreement; 0.41 to 0.60, moderate agreement; 0.21 to 0.40, fair agreement; 0.01 to 0.20, slight agreement; and 0.00 or less, no agreement greater than what could be expected by chance alone.¹

Results:

The average difference among observers in both interobserver reliability and intraobserver reproducibility demonstrated less than half a point difference in all parameters. When there was a difference among observers it was within one point in >98% of the time. The pair-wise k statistic analysis for interobserver reliability and intraobserver reproducibility is summarized in **Appendix Table 1** and **Appendix Table 2**. This ranged from slight to moderate interobserver agreement and from good to excellent intraobserver agreement among the three radiologists.

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Appendix Table 1. Interobserver Agreement for FOS

	TW-AP	TW-RV	AP-RV
Average Difference	0.54	0.35	0.73
Standard Deviation	0.51	0.49	0.53
Kappa statistic	0.280		
P-value	0.000028		
Range	0.15 - 0.41		

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PROSPECTIVE EVALUATION OF OSSEOUS INTEGRATION AND PATIENT OUTCOMES

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Appendix Table 2. Intraobserver Agreement for FOS

	TW	AP	RV
Average Difference	0.35	0.27	0.31
Standard Deviation	0.49	0.45	0.53
Kappa statistic	0.50	0.61	0.69
P-value	0.000058	0.0000012	0.0000000006
Range	0.26 - 0.75	0.37 - 0.86	0.47 - 0.91

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