



Fig. E-1A



Fig. E-1B



Fig. E-1C

Figs. E-1A, E-1B, and E-1C Examples of grades 0, I, and II of the ankle osteoarthritis classification system²⁶. (Grade III indicates [sub]total disappearance or deformation of the joint space; this was not seen in the study group.) **Fig. E-1A** Grade 0, normal joint or subchondral sclerosis. **Fig. E-1B** Grade I, osteophyte (arrow) without joint space narrowing. **Fig. E-1C** Grade II, joint space narrowing (arrow) with or without osteophytes.

TABLE E-1 Patient Characteristics and Primary Outcomes

Sex	Age at Surgery (yr)	Side	Trauma	Duration of Symptoms (mo)	Location*	Surgical Procedure†	Duration of Follow-up (mo)	Ogilvie-Harris Score	Osteoarthritis Classification	
									Preop.	Final
M	31	R	Y	36	AL	ADD	127	Excellent	0	0
F	32	R	Y	18	PC	AD	144	Excellent	0	0
F	24	R	N	6	CM	ADD	141	Good	0	I
F	24	R	Y	1	CM	AD	138	Good	0	0
M	26	R	Y	10	PM	ADD	124	Good	0	0
M	46	R	Y	32	PL	AD	112	Fair	0	I
M	36	R	N	42	CC	ADD	128	Good	I	I
M	47	R	N	48	CL	ADD	101	Good	I	I
M	20	L	Y	24	CL	AD	112	Good	0	I
M	16	L	N	24	CM	ADD	148	Fair	0	0
M	33	L	Y	48	CM	ADD	104	Fair	I	I
M	20	L	Y	24	CM	ADD	167	Good	I	I
F	28	L	N	36	CM	ADD	155	Fair	0	I
M	33	L	Y	24	AL	AD	198	Good	0	I
M	37	R	Y	24	CL	ADD	120	Excellent	0	I
F	20	R	Y	84	CM	ADD	148	Good	I‡	I
M	29	R	Y	36	CM	ADD	131	Good	I	I
F	22	L	N	60	PM	ADD	113	Good	0	0
M	48	R	N	144	CM	ADD	111	Good	II	II
M	38	R	Y	12	CL	ADD	106	Fair	I	I
F	45	L	Y	372	AL	AD	110	Excellent	0	0
M	34	L	N	12	CM	ADD	186	Good	I	I
F	51	R	N	60	CM	ADD	221	Good	II‡	II
M	19	L	Y	12	CM	AD	112	Excellent	0	I
F	52	L	N	12	CM	AD	134	Fair	0	I
F	36	R	Y	26	CM	ADD	120	Fair	I	I
F	39	R	Y	4	CL	ADD	134	Excellent	0	I
M	35	R	N	12	CM	ADD	106	Good	0	I
F	36	R	Y	9	PM	AD	115	Good	0	0
M	34	L	Y	3	CM	ADD	158	Excellent	I	I
F	21	R	Y	56	CM	PDD	114	Fair	0	0
M	29	R	Y	60	CL	PDD	106	Fair	0	I
M	27	L	Y	9	CL	ADD	124	Good	I	I
F	24	R	Y	6	CM	ADD	189	Good	0	I
F	38	L	N	9	CC	ADD	121	Excellent	0	0
M	48	R	Y	15	CM	ADD	163	Good	0	0
F	21	R	Y	24	PM	ADD	158	Good	0	0
M	42	L	Y	24	CM	PD	113	Good	I	I
F	13	R	Y	13	PL	ADD	174	Good	I	I
M	35	R	Y	12	CM	AD	142	Good	0	0
M	30	L	Y	9	PL	ADD	145	Excellent	0	I

M	26	R	Y	11	PL	ADD	139	Good	0	I
F	23	R	Y	48	CM	ADD	152	Good	0	0
M	27	L	Y	12	CM	ADD	112	Fair	0	I
F	20	R	N	14	CM	ADD	242	Excellent	§	§
M	30	L	N	45	AL	ADD	137	Good	§	§
M	33	R	Y	9	CL	ADD	115	Good	I	I
F	27	L	Y	8	PM	ADD	218	Good	0	I
M	26	L	Y	12	AL	ADD	205	Fair	0	0
M	45	L	Y	12	CM	ADD	141	Good	0	0

*AL = anterolateral, PC = posterocentral, CM = centromedial, PM = posteromedial, PL = posterolateral, CC = centrocentral, and CL = centrolateral. †ADD = anterior debridement and drilling, AD = anterior debridement, PDD = posterior debridement and drilling, and PD = posterior debridement. ‡The classification of the first postoperative radiographs is given because preoperative radiographs were unavailable. §The patient did not attend the follow-up visit, so final radiographs were not obtained, but the patient completed the questionnaires by mail.

TABLE E-2 Results of Studies with a Mean Follow-up of Five Years or More

Authors	Year	N	Follow-up* (yr)	Outcome Measures	Good or Excellent Score
Baker and Morales ³²	1999	12	10 (8-14)	Own scoring system	83%
Schuman et al. ¹¹	2002	22	5 (2-11)	Ogilvie-Harris score	86%
Hunt and Sherman ^{14,†}	2003	28	6 (1-14)	Berndt and Harty score	46%
Ferkel et al. ¹⁹	2008	50	6 (2-13)	Alexander scale	72%
Becher et al. ³¹	2010	39	6 (1-10)	Hannover scoring system	79%
Choi et al. ¹⁰	2012	173	6 (2-10)	AOFAS‡	77%
Present study		50	12 (8-20)	Ogilvie-Harris score	78%

*The values are given as the mean, with the range in parentheses. †Eight patients in this study had had previous ankle surgery. ‡AOFAS = American Orthopaedic Foot & Ankle Society ankle-hindfoot score.

TABLE E-3 Prognostic Factors of Success After Arthroscopic Treatment of Osteochondral Talar Lesions According to the Literature*

Study	N	Mean Follow-up (mo)	Outcome	Prognostic Factors											
				Lesion Size	Lesion Location	Stage	Preop. OA	Age	BMI	Sex	Affected Side	Trauma	Duration of Symptoms	Duration of Follow-up	
Kumai et al. ²⁹ , 1999	18	114	Berndt and Harty score					Yes (<30 yr)							
Hunt and Sherman ¹⁴ , 2003	28	66	Berndt and Harty score, Martin score, SANE			Arthroscopic: NS		NS							NS
Robinson et al. ³⁰ , 2003	65	42	Berndt and Harty score		NS	MRI: yes (Hepple grade 5 vs. 1-4)		NS				NS	Yes (<1 yr)		
Gobbi et al. ⁶ , 2006	33	53	AOFAS	Yes (cont.)											
Chuckpaiwong et al. ⁷ , 2008	105	32	VAS, AOFAS, Roles and Maudsley score	Yes (<15 mm)				Yes (cont.)	Yes (cont.)	NS		Yes	Yes (cont.)		
Ferkel et al. ¹⁹ , 2008	50	71	AOFAS, Weber score		NS	Arthroscopic yes (Ferkel grade A-3 vs. D-F); radiographic, CT, and MRI: NS		NS		NS	NS		NS	NS	
Choi et al. ⁸ , 2009	120	45	AOFAS	Yes (<15 mm ²)	NS			NS				NS	NS		
Lee et al. ³⁴ , 2010	35	33	AOFAS	NS				NS	NS						Yes (<1 yr)
Guo et al. ⁹ , 2010	43	24	Patient grading	Yes (<10 mm)	NS			NS		NS					
Becher et al. ³¹ , 2010	39	70	HSS, VAS					NS	Yes (<25 kg/m ²)						
Choi et al. ¹⁰ , 2011	173	70	AOFAS	Yes (<15 mm ²)	NS			NS		NS		NS	NS		

Present study	50	141	Ogilvie-Harris score, OA classification	NS	NS	Radiographic: NS	NS	NS	NS	NS	NS	NS	NS	NS
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*CT = computed tomography, MRI = magnetic resonance imaging, OA = osteoarthritis, BMI = body mass index, SANE = Single Assessment Numeric Evaluation, NS = not significant, AOFAS = American Orthopaedic Foot & Ankle Society ankle-hindfoot score, cont. = continuous (i.e., no cutoff point defined), HSS = Hannover scoring system, and VAS = visual analog scale.