

TABLE E-1 Syndesmosis Sprain Treatment

Study	Injuries	Level of activity	Time lost (range)	Average Follow-up	Recurrent Injuries	Outcome Measure	Functional Outcome	Surgery
Wright ¹⁰ (2004)	14	Professional Hockey	45 days (6-137)	Not specified	Not reported	None	N/A	1/14
Boytim ⁵ (1991)	15	Professional Football	6.3 practices (2 – 21), 1.4 games (0 – 5)	Not specified	Not reported	None	N/A	0/15
Nussbaum ⁸ (2001)	60	NCAA Division I athletes	13.4 days (5 – 24)	Minimum 6 months for 53 patients	3/53 (6%) (3 with recurrent ankle sprains)	5 point scale for symptoms and function	4.7 (good – excellent function)	0% (0/60)
Taylor ⁹ (1992)	44	NCAA Division I Football	31 days (10 – 98)	47 months	19/44 (43%) (15 lateral ankle sprains, 3 syndesmosis sprains, 1 bimalleolar fracture)	5 point scale for symptoms and function	>4 (none to mild symptoms)	0% (0/44)
							4.2 (good – excellent function)	
Hopkinson ⁷ (1990)	15	Army Cadets	52 days (17 – 115 days)	20 months (7 – 39 months) in 10 patients	None	None	No recurrent instability symptoms	2/15
Gerber ⁶ (1998)	16	Army Cadets	Not specified, although < 6 months for all patients	Minimum 6 months	Not reported	Acceptable / unacceptable (no pain, no decrease in function, functional hop >80% of uninjured side)	Acceptable outcomes for 4/16 at 6 weeks and 7/16 at 6 months	

NCAA = National Collegiate Athletic Association, and N/A = not available.

TABLE E-2 Instrumented Laxity at Final Follow-up

Study	Instrumen t	Force	PT ^a [mm ^b (variation) ^c]	HG ^d [mm(variation)]	p ^e
Andersson ¹¹	KT1000	maxman ^f <3mm	2.1 (2.0) 71%	3.1(2.3) 50%	0.05*
Aune ²²	KT1000	maxman <3mm	2.7 (2.2) nr	2.7(2.1) nr	ns ^g
Beynnon ²³	KT1000	133N ^h <3mm	1.1(0.9) 77%	4.4(1.0) 45%	0.004*
Ejerhed ²⁴	KT1000	89N <3mm	2.0 nr ^j	2.25 nr	ns
Eriksson ²⁵	Stryker	18.2kg ⁱ <3mm	nr 49%	nr 43%	ns
Feller ²⁶	KT1000	134N <3mm	0.5(1.5) 95%	1.6(1.3) 85%	0.05*
Jansson ²⁷	CA4000	nr <3mm	1.7 nr	1.2 nr	ns
Laxdal ³⁰	KT1000	89N <3mm	1(-5-8) 71%	1(-5-8) 78%	ns
O'Neill ²⁸	KT2000	maxman <3mm	nr 87%	nr 83%	ns
Shaieb ²⁹	KT1000	134N <3mm	1.5 79%	2.5 45%	0.13

Key:

^a PT = patellar tendon^b mm = millimeters^c variation = individual study variation^d HG = hamstring graft^e p = p value^f maxman = maximum manual^g ns = not significant^h N = Newtonⁱ kg = kilogram^j nr = not reported

* = difference was significant

TABLE E-3 Patellofemoral Pain at Final Follow-up

Study	"Scale"	Anterior Knee Pain		p ^c	"Scale"	Kneeling Pain		p	Comment
		PT ^a	HG ^b			PT	HG		
Anderson ²¹	PF crepitus	--	--	--	--	--	--	--	Equal IKDC criteria
Aune ²²	Pain Cinn	16%	13%	ns ^d	VAS ^e	36%	19%	0.05*	
Beynnon ²³	none	32%	23%	ns	--	--	--	--	
Ejerhed ²⁴	define test	19%	21%	ns	"knee walk"	53%	23%	0.01*	
Eriksson ²⁵	Werner	43	43	ns	Werner	2	4	0.0001*	
Feller ²⁶	VAS	43%	33%	ns	VAS	67%	26%	0.01*	
Jansson ²⁷	Kujala	nr ^f	nr	ns	--	--	--	--	
Laxdal ³⁰	Subjective Pain	29%	5%	.007	"knee walk" [^]	54%	5%	.0001	
O'Neill ²⁸	PF crepitus	--	--	--	--	--	--	--	Equal IKDC criteria
Shaieb ²⁹	none	42%	20%	0.05*	--	--	--	--	Asked single question

Key:

^a PT = patellar tendon^b HG = hamstring^c p = p value^d ns = not significant^e VAS = visual analog scale^f nr = not reported[^] % knee walk difficult or impossible

PF = patellofemoral

IKDC = International Knee Documentation Committee

Cinn = Cincinnati

* = difference was significant