

Supplementary material

Appendix Table A1. Subgroup analysis: supraspinatus integrity: patients' demographics

Group	SSp: intact	SSp: non-intact	<i>p-value</i>
Age at surgery (years)	58.38 [52.30-64.73]	61.26 ($\pm$ 8.07)	0.0438
BMI (kg/m ²)	25.79 ($\pm$ 3.60)	25.71 [23.44-29.04]	0.4586 (n.s.)
F/M ratio	0.57/0.43	0.51/0.49	0.5533 (n.s.)
Operated side L/R ratio	0.30/0.70	0.26/0.74	0.6637 (n.s.)
Dominant side L/R ratio	0.02/0.98	0.02/0.98	1.0000 (n.s.)
Tear size C1-C2/C3-C4 ratio	0.80/0.20	0.43/0.57	0.0002
Smoking at follow-up Y/N ratio	0.19/0.81	0.11/0.89	0.4010 (n.s.)
Smoking at surgery Y/N ratio	0.22/0.78	0.17/0.83	0.6194 (n.s.)
DM at follow-up Y/N ratio	0.11/0.89	0.26/0.74	0.0715 (n.s.)
DM at surgery Y/N ratio	0.04/0.96	0.09/0.91	0.4129 (n.s.)
Trauma Y/N ratio	0/1	0.17/0.83	0.0016

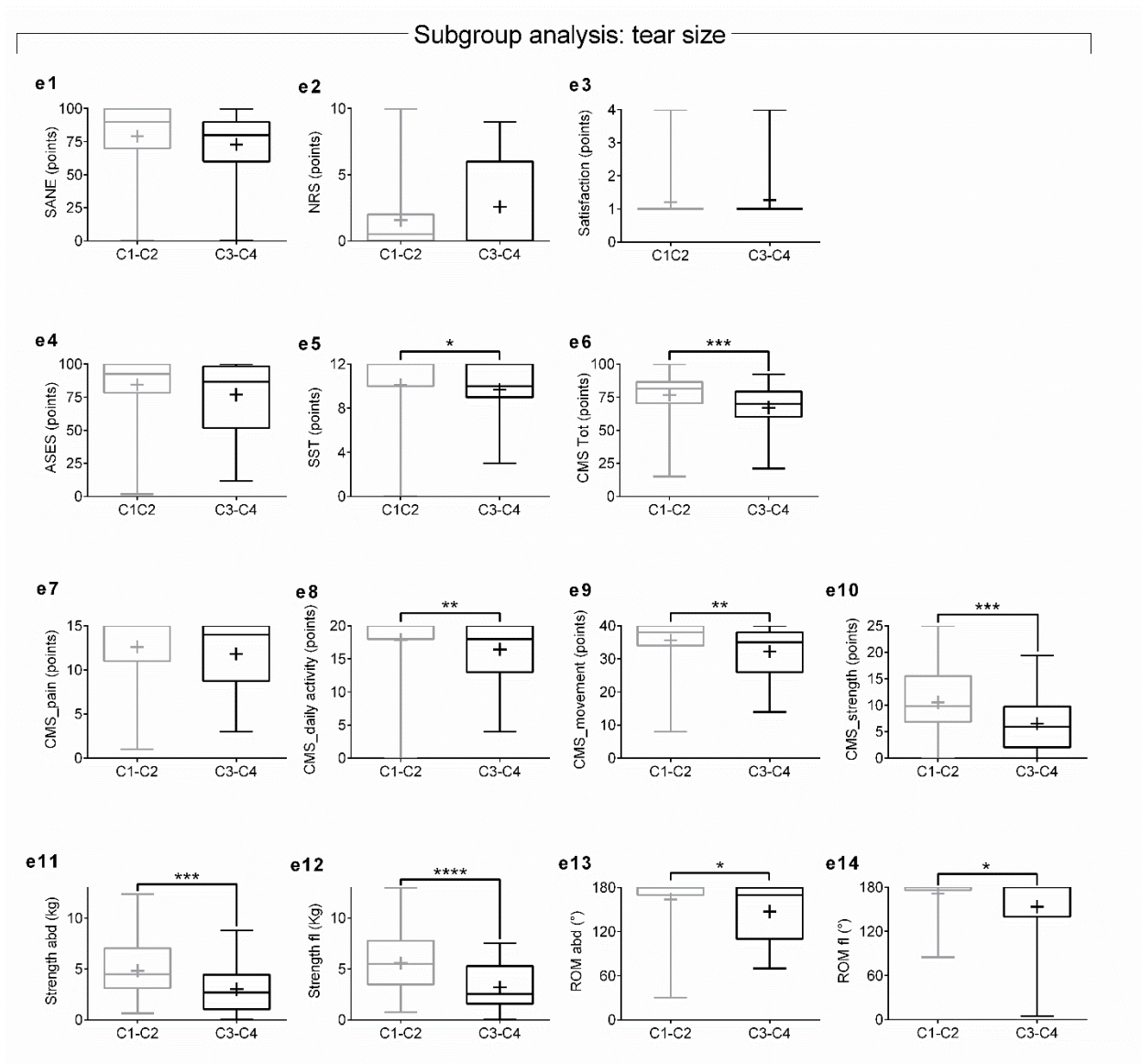
Data are reported as mean ($\pm$ SD), median [Q1-Q3] or frequency/ratio. BMI: Body Mass Index; C1-C2: small tear size; C3-C4: large tear size; DM: Diabetes Mellitus; F/M: Female/Male; L/R: Left/Right; N: No; n.s.: not significant; Q1: first quartile; Q3: third quartile; SD: Standard Deviation; SSp: supraspinatus tendon; Y: yes.

Appendix Table A2. Subgroup analysis: supraspinatus integrity: summary of main clinical and radiological results.

Group	SSp: intact	SSp: non-intact	<i>p-value</i>
SANE: 0-100 (points)	92.50 [70-100]	80 [50-90]	<i>0.0012</i>
NRS: 0-10 (points)	0.00 [0.00-2.25]	0.00 [0.00-5.00]	<i>0.4681 (n.s.)</i>
ASES: 0-100 (points)	95.83 [78.33-100.00]	86.67 [50.00-98.33]	<i>0.0062</i>
SST: 0-12 (points)	12.00 [10.00-12.00]	10.00 [7.00-12.00]	<i>0.0025</i>
Satisfaction: 1-4 (points)	1 [1-1]	1 [1-2]	<i>0.0041</i>
CMS Tot: 0-100 (points)	82.49 [75.16-88.68]	70.07 [54.42-78.79]	<i><0.0001</i>
CMS_pain: 0-15 (points)	15.00 [13.00-15.00]	14.00 [8.50-15.00]	<i>0.0688 (n.s.)</i>
CMS_daily activities: 0-20 (points)	20.00 [18.00-20.00]	18.00 [13.00-20.00]	<i>0.0003</i>
CMS_movement 0-40 (points)	38.00 [35.50-40.00]	36.00 [26.00-38.00]	<i>0.0135</i>
CMS_strength: 0-25 (points)	11.76 ($\pm$ 5.59)	4.95 [1.98-9.24]	<i><0.0001</i>
Strength ab (Kg)	4.98 [3.25-7.34]	2.25 [0.90-4.20]	<i><0.0001</i>
Strength fl (Kg)	6.05 ($\pm$ 2.50)	2.40 [1.60-4.85]	<i><0.0001</i>
ROM ab (°)	180 [170-180]	180 [110-180]	<i>0.0111</i>
ROM fl (°)	180 [180-180]	180.0 [140-180]	<i>0.0082</i>
AHD (mm)	9.56 ($\pm$ 2.26)	6.18 ($\pm$ 3.47)	<i><0.0001</i>
Hamada OA_grade 1/> 1 ratio	0.94/0.06	0.45/0.55	<i><0.0001</i>
Samilson and Prieto OA_grade 0/> 0 ratio	0.61/0.39	0.38/0.62	<i>0.0286</i>

Data are expressed as mean ($\pm$ SD), median [Q1-Q3] or frequency/ratio. ab: abduction; AHD: AcromioHumeral Distance; ASES: American Shoulder and Elbow Surgeons score; CMS: Constant-Murley Score; fl: flexion; NRS: Numeric Rating Scale; n.s.: not significant; OA: osteoarthritis; Q1: first quartile; Q3: third quartile; ROM: Range Of Motion; SANE: Simple Assessment Numeric Evaluation; SD: Standard Deviation; SSp: supraspinatus tendon; SST: Simple Shoulder Test.

Appendix Figures A1-A14. Box and whisker plots of the clinical results in patients with small (C1-C2) and large (C3-C4) rotator cuff tears. Each box represents the interquartile range (from the 25th to the 75th percentile) within which 50% of the values are represented. The plus sign and the line crossing horizontally each box represent the median and the mean of the data, respectively. The error bars show the minimum and maximum values. Unpaired t test was used to test for differences between C1-C2 and C3-C4 groups. Only p values < 0.05 are indicated: * p < 0.05, ** p < 0.01, *** p < 0.001, and **** p < 0.0001.



Appendix Figures A15-A28. Box and whisker plots of the clinical results in patients with and without intact supraspinatus tendon (SSp) at final follow-up. Each box represents the interquartile range (from the 25th to the 75th percentile) within which 50% of the values are represented. The plus sign and the line crossing horizontally each box represent the median and the mean of the data, respectively. The error bars show the minimum and maximum values. Unpaired t test was used to test for differences between intact and non-intact groups. Only p values < 0.05 are indicated: * p < 0.05, ** p < 0.01, *** p < 0.001, and **** p < 0.0001.

