

Traumatische SLAP-letsels: conservatieve behandeling

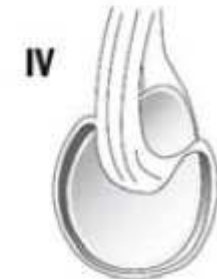
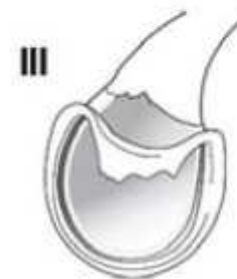
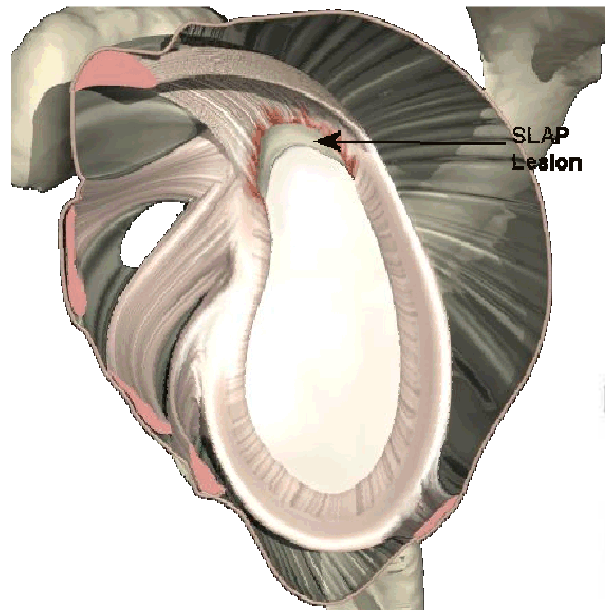
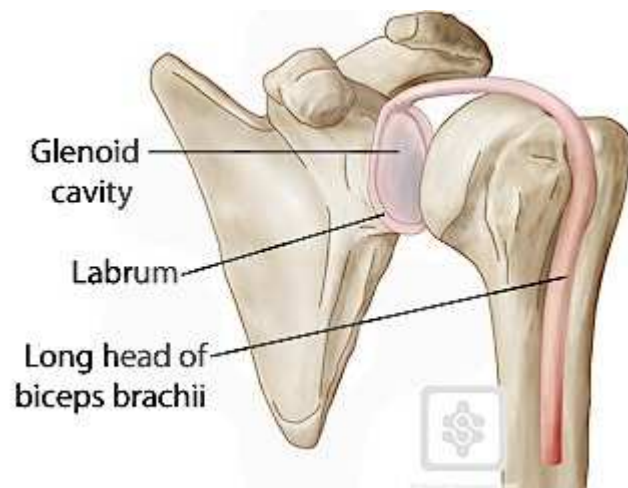
Dorien Borms
Phd student

Rehabilitation sciences and physiotherapy,
Ghent University

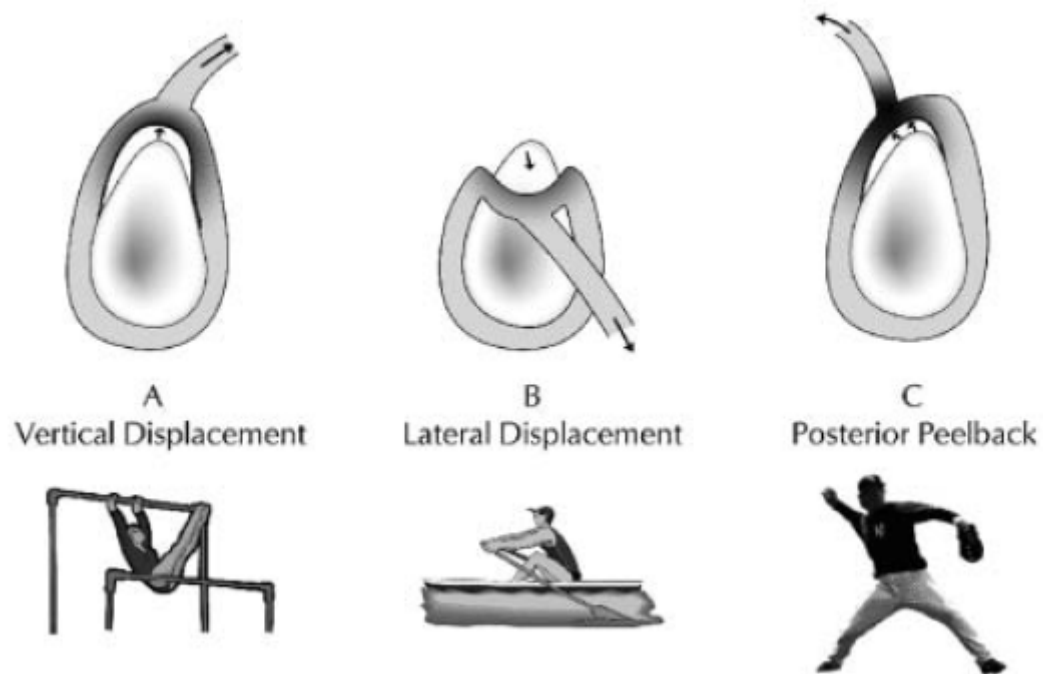


Overzicht

- **Introductie**
- Richtlijnen conservatieve en operatieve behandeling
- Bicepsbelasting tijdens revalidatie-oefeningen
- Take home messages



Ontstaan?



Gates et al., 2009

Vanuit een klinisch standpunt

- Hoog aantal **SLAP-diagnoses** bij bovenhandse sporters
- Tot voor kort hoog aantal **SLAP-repairs** met matige tot uitstekend succes en RTP

! Shift van naar **conservatieve** behandeling



Resultaat behandeling?

Conservatief

- Edwards et al., 2010
- Fedoriw et al., 2014



Chirurgie

- Provencher et al., 2013
- Kanatli et al., 2011
- Cho et al., 2010
- Friel et al., 2010
- Ah et al., 2009
- Abbott et al., 2009
- Lim et al., 2008
- ...
- Gorantla et al., 2010 (Systematic review)



Wat is de beste behandeling voor bovenhandse atleten met een SLAP-laesie?



Algemene richtlijnen



- Conservatieve behandeling: behandeldoelen en richtlijnen (Knesek et al., 2012)



- Postoperatieve revalidatie: bescherming 'surgery site' en timing (Burkhart et al., 2003, Verborgt & Van Riet, 2012)

Conservatieve behandeling

- Spierkracht en -uithouding
- Normale GH en ST bewegingen
- Proprioceptie, stabilisatie en neuromusculaire controle
- Massage
- Passief en actief geassisteerde oefeningen
- Stretching posterieur kapsel
- Van gesloten keten naar open keten

Algemene richtlijnen



- Conservatieve behandeling: behandeldoelen en richtlijnen (Knesek et al., 2012)



- Postoperatieve revalidatie: bescherming 'surgery site' en timing (Burkhart et al., 2003, Verborgt & Van Riet, 2012)

Postoperatieve revalidatie

- 0-3 w: sling en /p/ ROM binnen pijngrens
- 3-6w: ROM ↑ en /a/ geassisteerde oef
- 6w: versterken scapulaire spieren en RC
- 8w: biceps training
- 14w: plyometrie, ecc biceps training, isokinetics
- 4m: werpoefeningen
- 6m: return to train
- 7m: return to play

Bicepsbelasting???

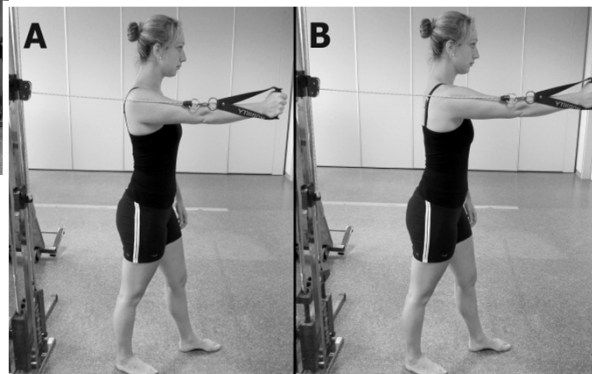
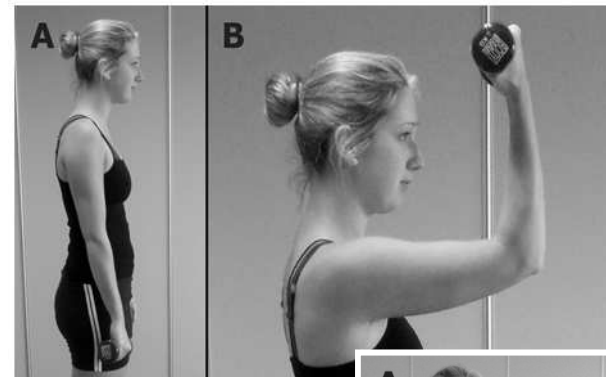
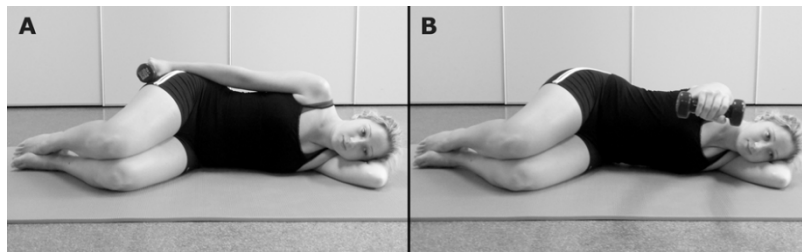




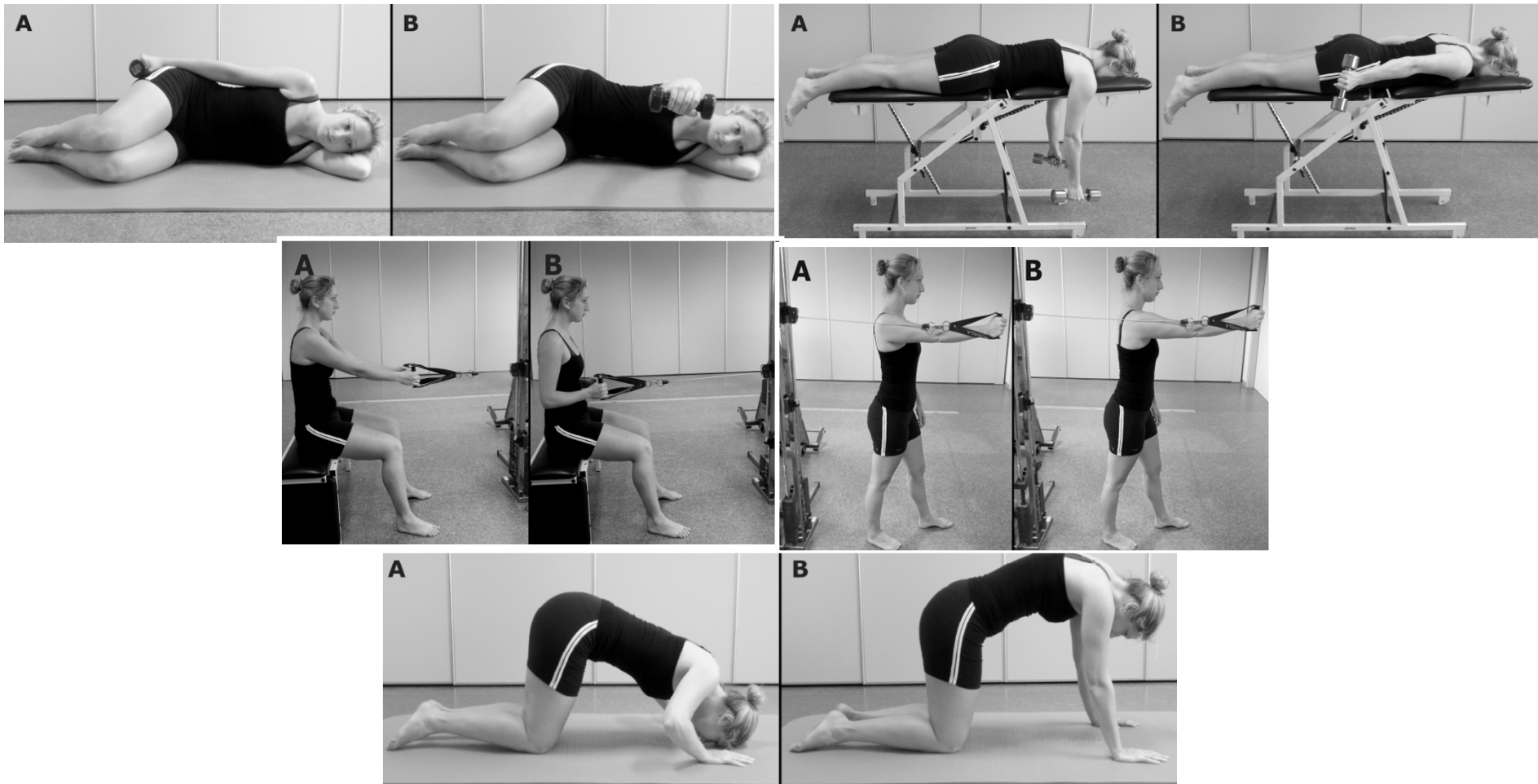
Rehabilitation Exercises for Athletes With Biceps Disorders and SLAP Lesions

A Continuum of Exercises With Increasing Loads on the Biceps

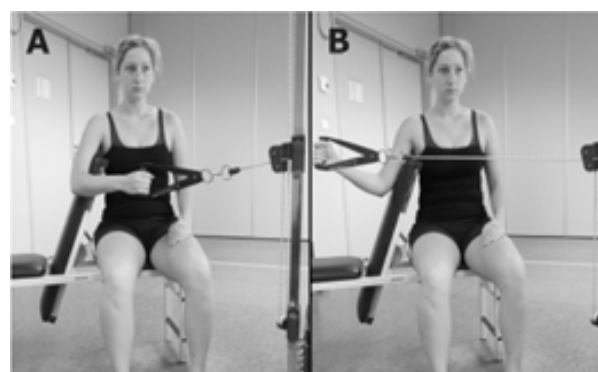
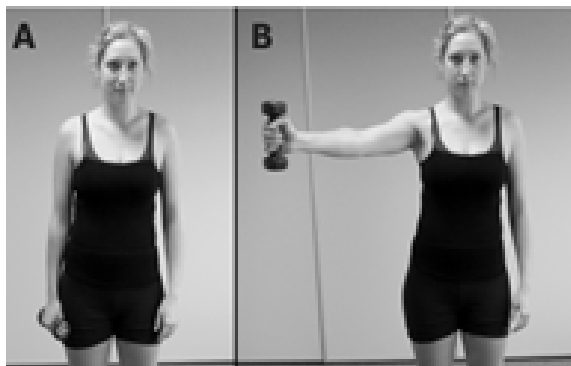
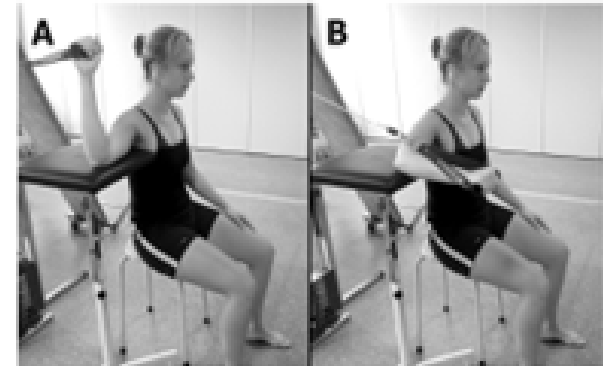
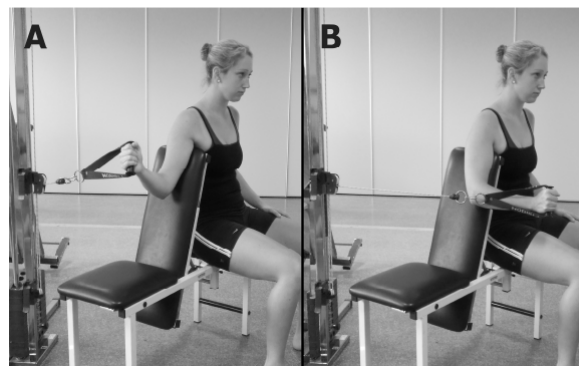
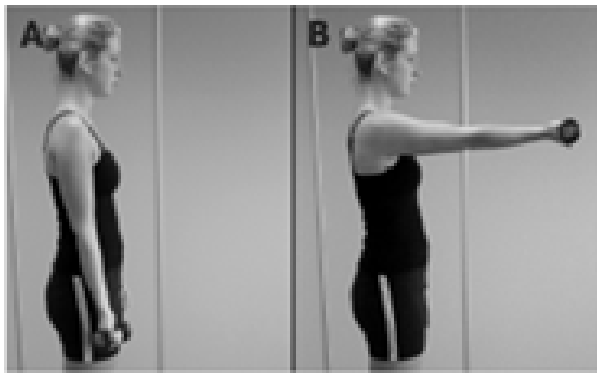
Ann M. Cools,^{*,†} PT, PhD, Dorien Borms,[†] PT, MSc, Simon Cottens,[†] PT, MSc, Marcia Himpe,[†] PT, MSc, Stijn Meersdom,[†] PT, MSc, and Barbara Cagnie,[†] PT, PhD



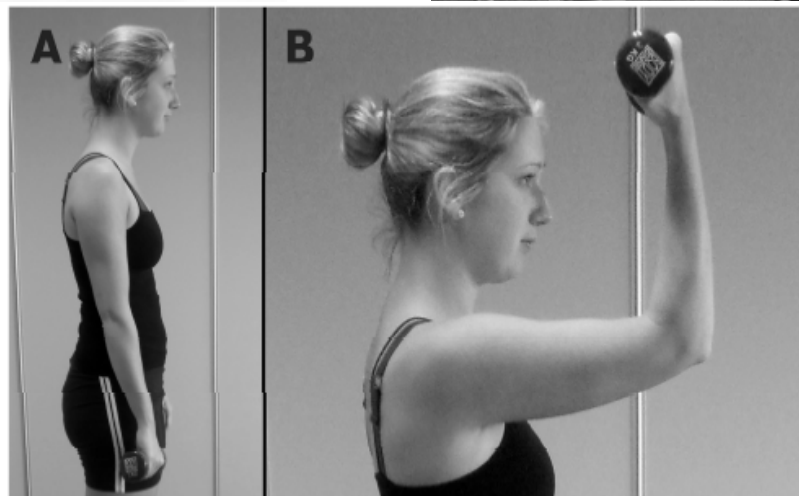
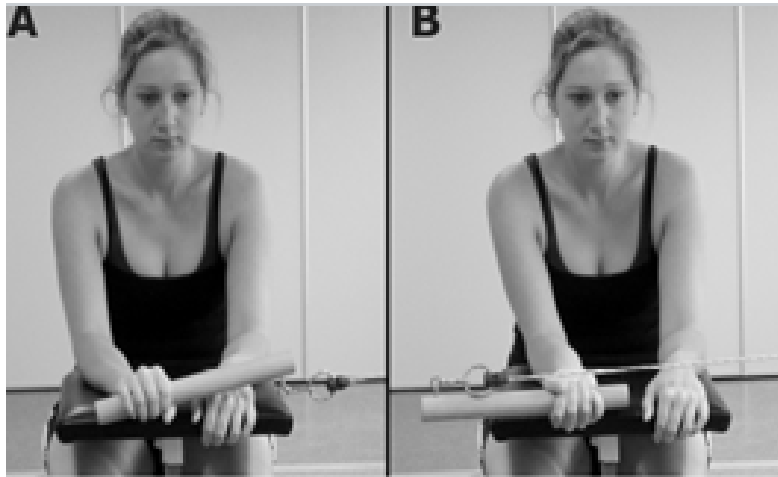
Scapulothoracale spieren (5)



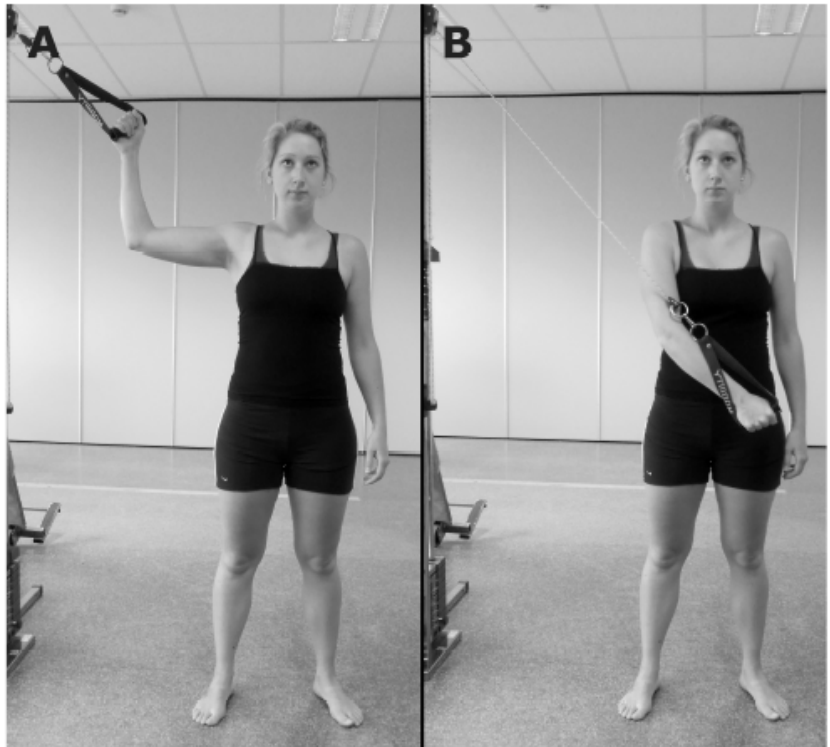
Glenohumerale spieren (6)



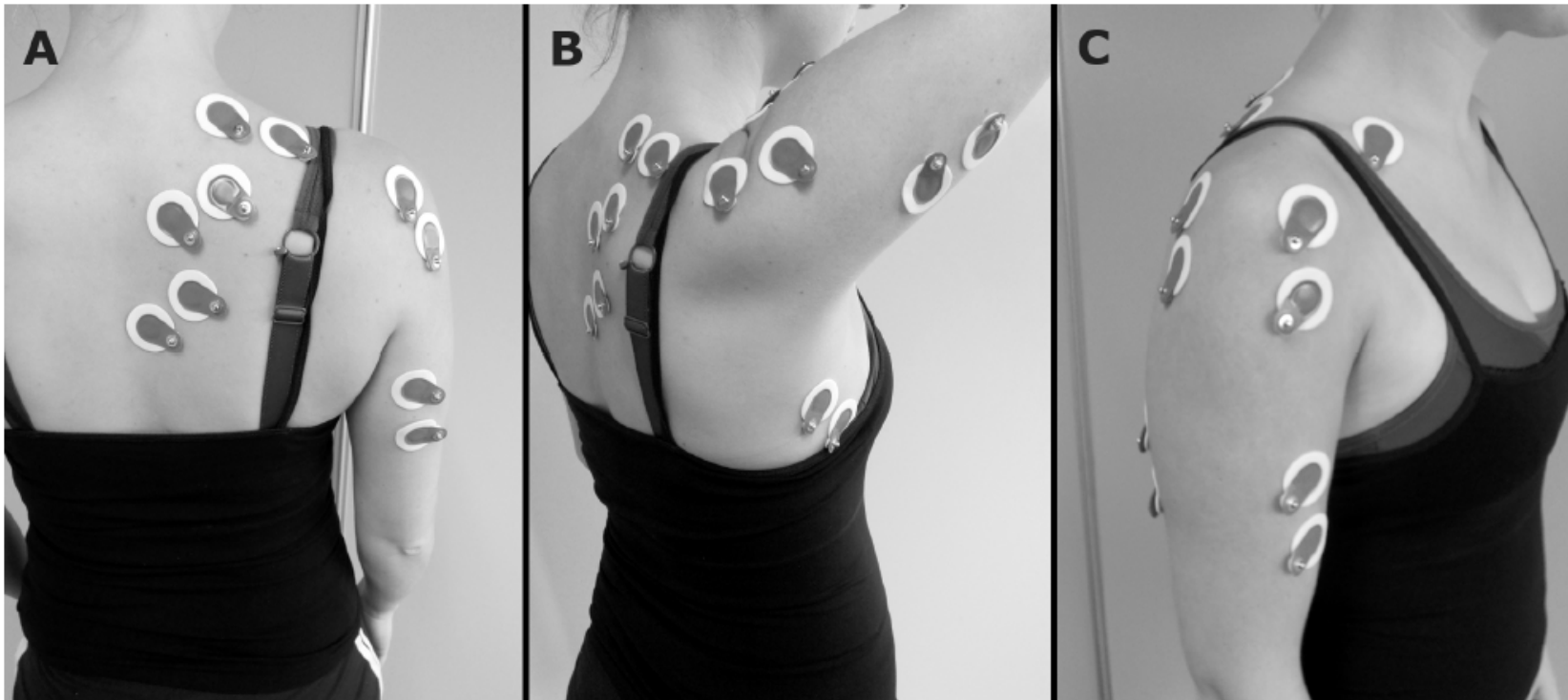
Biceps brachii (3)



Functionele diagonalen (2)



sEMG



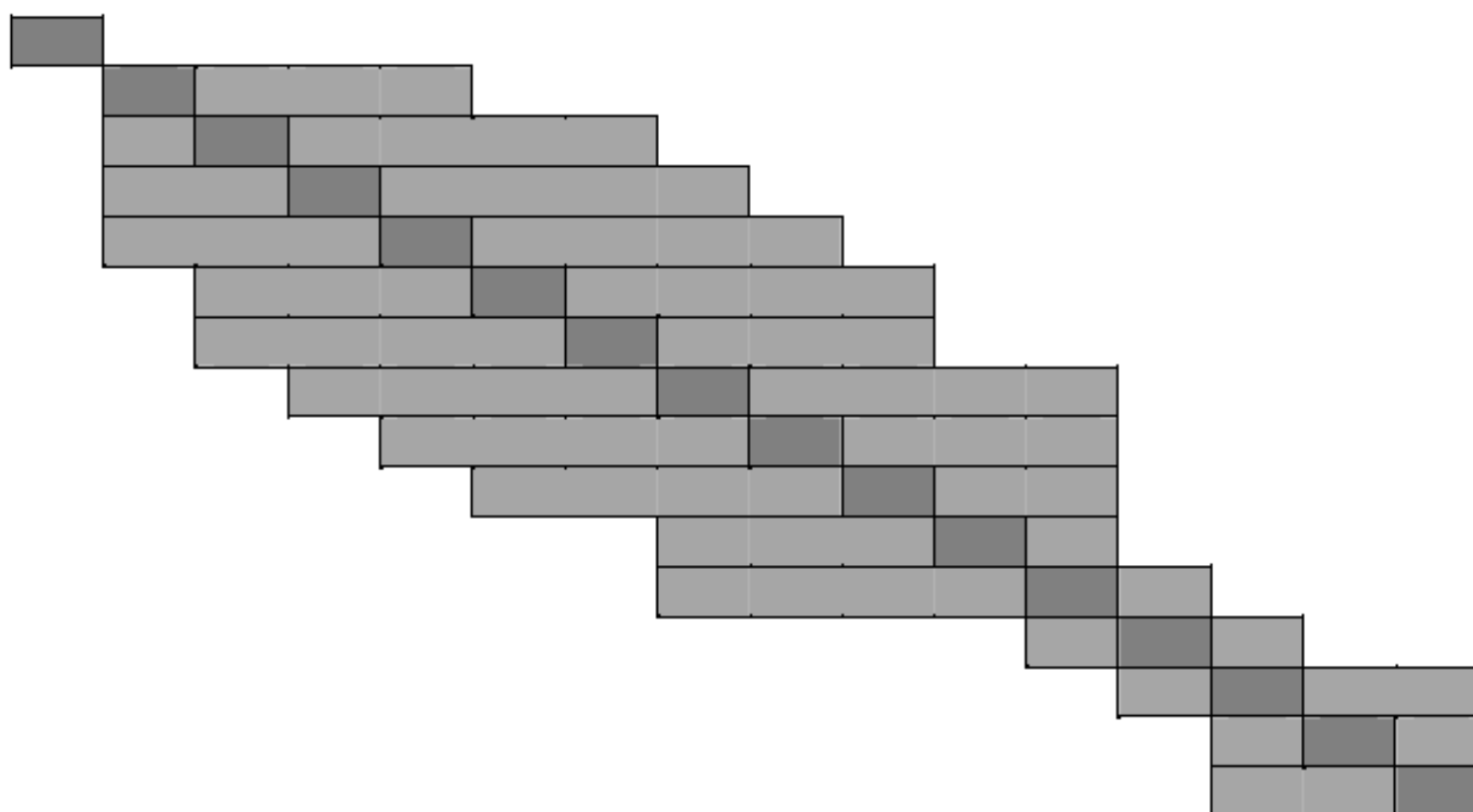
UT - MT - LT

SA

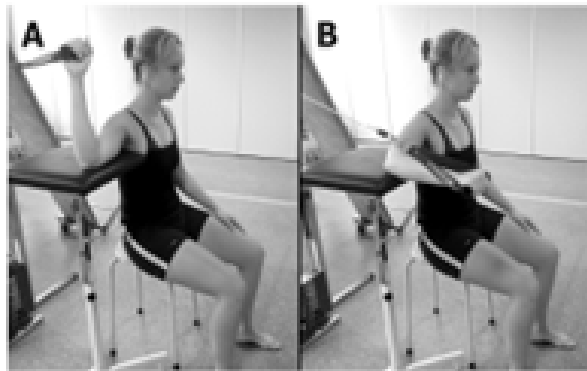
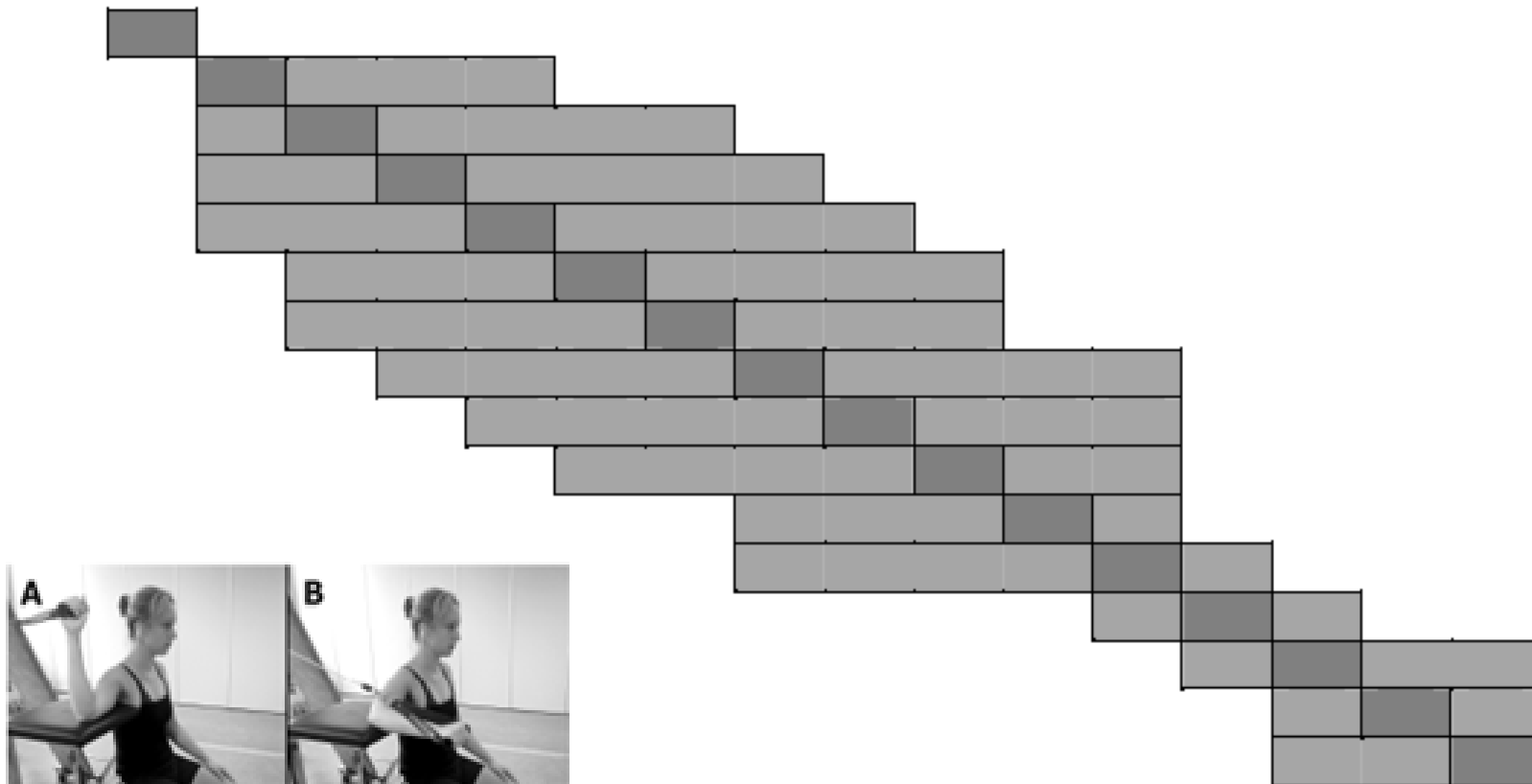
AD - PD - BB - TB

No.	UT		MT		LT		SA		DA		DP		BB		TB	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
1	32,7	11,09	78,3	45,37	76,6	38,66	10,3	9,41	43,4	22,21	125,6	66,40	9,7	6,18	33,8	17,49
2	17,1	11,54	36,1	15,32	28,6	34,56	10,3	6,44	7,8	4,14	64,6	21,69	4,2	2,05	50,1	16,85
3	14,2	11,20	23,1	12,50	14,8	19,66	4,1	3,12	7,3	4,56	31,0	14,84	5,8	4,61	8,9	6,02
4	8,9	6,81	6,0	3,35	5,9	4,00	42,7	15,49	53,2	25,09	12,2	10,60	8,9	7,49	16,3	7,69
5	11,5	5,17	10,2	5,71	8,5	5,60	37,0	18,12	41,2	20,12	8,3	5,83	4,8	3,15	30,5	12,72
6	48,2	22,42	31,3	15,68	41,0	24,04	68,9	16,85	107,9	44,97	17,8	10,50	35,9	18,82	15,7	8,05
7	55,2	22,74	45,4	17,09	45,2	27,31	58,1	14,88	106,4	39,32	27,5	18,61	29,0	16,69	16,0	10,76
8	2,7	1,99	3,2	1,99	4,2	2,17	9,4	5,49	15,7	12,36	2,0	1,55	6,2	3,51	5,9	4,43
9	22,3	12,09	57,5	25,05	75,1	48,97	13,3	8,97	11,4	7,27	49,5	22,48	8,2	5,10	21,7	10,79
10	3,2	2,26	3,3	1,74	3,0	1,82	4,6	3,18	4,3	3,90	3,4	2,60	2,2	1,24	10,7	5,26
11	23,7	9,93	44,6	40,07	74,9	56,26	43,6	14,36	13,7	18,04	38,6	23,85	11,2	6,04	17,5	12,20
12	4,7	3,39	11,8	11,08	20,6	18,88	5,8	4,10	4,1	2,45	19,4	14,34	15,4	7,19	18,7	12,67
13	2,9	2,00	7,2	6,44	21,7	17,78	8,1	5,07	10,8	9,23	5,6	3,31	34,6	15,91	10,3	5,72
14	33,0	19,20	20,2	10,99	32,5	19,65	47,9	14,01	80,5	32,36	11,1	6,20	19,3	10,06	9,7	5,90
15	7,9	5,29	6,4	4,69	6,0	4,86	15,0	8,93	14,0	11,56	5,8	3,61	7,9	4,63	14,7	6,73
16	43,6	21,14	48,7	16,48	55,8	30,34	48,0	17,09	53,2	23,16	41,3	23,35	12,7	5,40	16,4	9,97

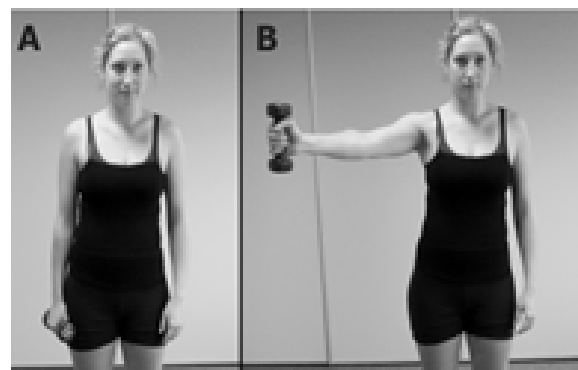
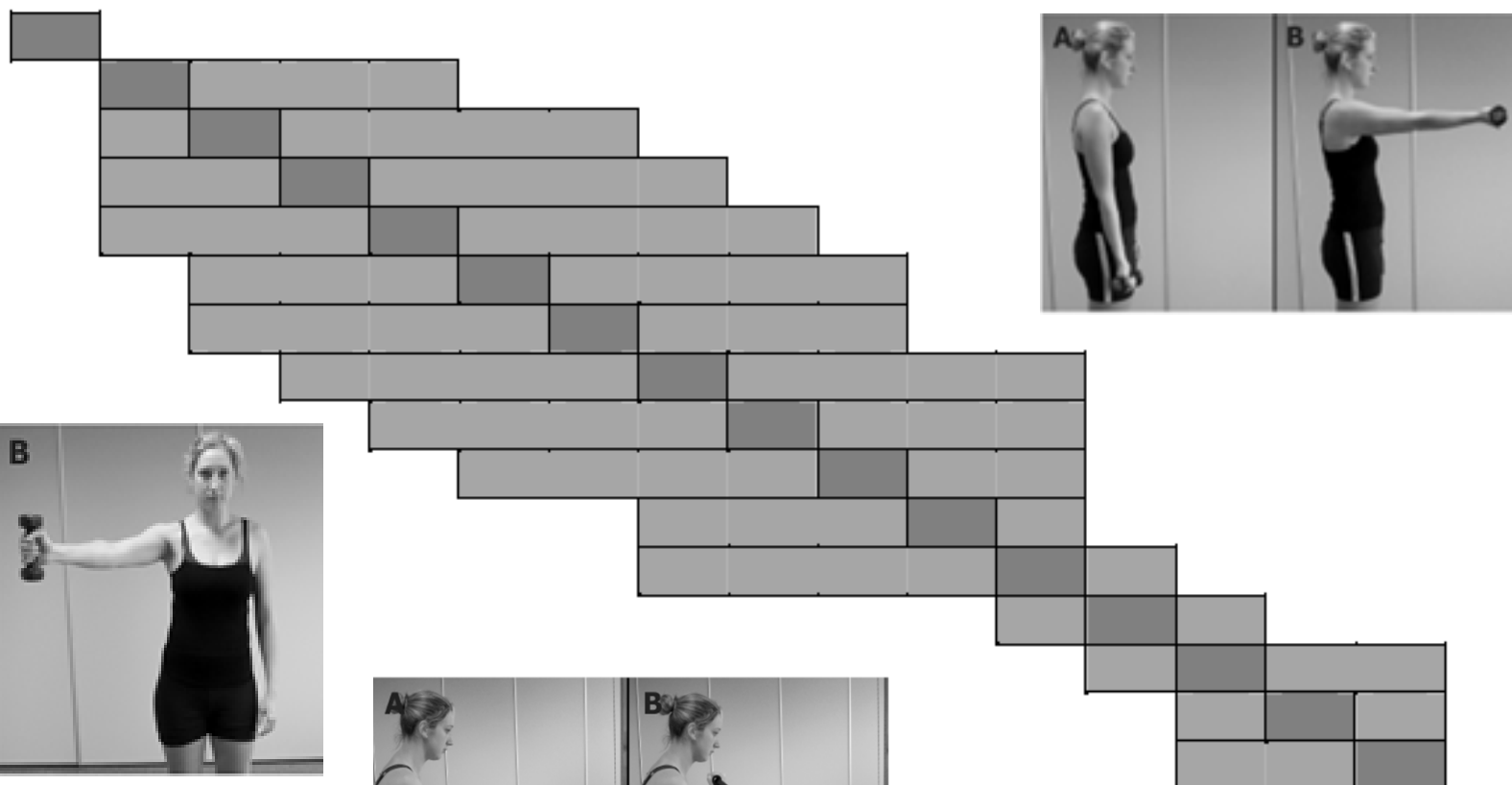
No.	10	2	5	3	8	15	9	4	1	11	16	12	14	7	13	6
%MVC	2.2	4.2	4.8	5.8	6.2	7.9	8.2	8.9	9.7	11.2	12.7	15.4	19.3	29.0	34.6	35.9



No.	10	2	5	3	8	15	9	4	1	11	16	12	14	7	13	6
%MVC	2.2	4.2	4.8	5.8	6.2	7.9	8.2	8.9	9.7	11.2	12.7	15.4	19.3	29.0	34.6	35.9



No.	10	2	5	3	8	15	9	4	1	11	16	12	14	7	13	6
%MVC	2.2	4.2	4.8	5.8	6.2	7.9	8.2	8.9	9.7	11.2	12.7	15.4	19.3	29.0	34.6	35.9



Take home messages

- Algemene richtlijnen **conservatieve behandeling** van SLAP-laesies bij de bovenhandse atleet
 - OZ: **resultaat** conservatieve behandeling
- **Lage tot matige bicepsactiviteit** ter bescherming van het letsel in begin van revalidatie
 - OZ: **hoge bicepsbelasting** latere fase

Traumatische SLAP-letsels: conservatieve behandeling

Dorien Borms
Dorien.Borms@UGent.be