

**Online Suppl. Table 1.** Self-estimated condition (Numeric Rating Scale: 0 = worst possible condition, 10 = best possible condition), amount of pain medication (fixed combination of Oxycodon and Naloxon), self-estimated functional performance (Patient Specific Functional Scale: 0 = worst possible performance, 10 = best possible performance), and monitoring of swelling of the injured knee (circumference in cm)

Parameter	Session 1	#2	#3	Session 4	Session 5	Session 6	Session 7	Session 8
General condition	-		7	4-8	7	8	9	
Emotional	-		4	4-8	6	7	9	
Mental	-		10	6-8	6-7	7	9	
Physical	-		5	7	7	7	8	
Pain medication	2 times 1 tablet		-	-	1 tablet in the morning	-	½ tablet in the morning	
Stand up from chair	5		6	6	6	7-9	9	
Take a shower	2		7	8	9	7	9	
Towel off right foot	3		7	8	8	8	8	
Board a train	0		0	0	0	0	0	
Blow-dry hair while standing	1		7	7	9	9	10	
Circumference knee pre / post WATSU:								
- Middle of patella				41.0 / 41.0	42.3 / 41.8	39.0 / -	39.5 / 39.0	
- 7 cm proximal of patella				46.7 / 46.2	44.0 / 44.7	44.0 / -	43.5 / 44.0	

**Online Suppl. Table 2.** Results from analysis of qualitative data on the patient's description of her experiences. Categories are according to their content subdivided into 1: emotional, 2: mental, and 3: physical aspects

Categories	Mentions Related to WATSU		Mentions not Related to WATSU	
	absolute	%	absolute	%
1.1 "Positive" emotions (joy, surprise, curiosity, release)	24	12.9	4	2.7
1.2 Gratitude, notice of assistance and support	20	10.8	2	1.3
1.3 "Negative" emotions (stress, concerns, frustration, sadness)	13	7.0	18	12.1
2.2 Intellectual reflection, verbal interaction with caregivers	44	23.7	24	16.1
2.1 Body scheme, body perception, physical awareness	31	16.7	8	5.4
2.3 Mental and emotional awareness	17	9.1	0	0.0
2.4 Transfer-effects	7	3.8	7	4.7
3.1 Obstacles, physical difficulties	12	6.5	6	4.0
3.3 Physical interventions, progress, setbacks	7	3.8	55	36.9
3.4 Breath	6	3.2	1	0.7
3.2 Physical changes and reactions (swelling, discharge)	5	2.7	12	8.1
3.5 Pain	0	0.0	12	8.1
Total	186	100.0	149	100.0

**Online Suppl. Table 3.** Summarized reflection of the treatments based on the notes of the therapist. Comments from the patient-diary containing crucial additional information are added *italic* in square brackets. Medical requirements are printed in **bold** letters. Mentioned positions are illustrated in part in demo videos (follow attached links). The person treated in the videos is not the patient of the reported case and therefore presents with full joint-mobility

Session 1	<p>Treatment, video: <a href="http://boris.unibe.ch/id/eprint/92748">http://boris.unibe.ch/id/eprint/92748</a> Watch how slow movements in this position neither cause the hips to abduct nor adduct, whereas quick ones will.</p> <p>Observations, feedback</p>	<p>Extremely slow movements in order to <b>avoid adduction or abduction in the hip</b>. Focus on thorax: mobilization (extension, flexion, rotation), especially in the position “Seaweed”. Abduction of the arm up to 80° (the fractured ribs are assumable stable but still very painful). Emphasis on symmetry.</p> <p>The patient reports to be aware of having two legs for the first time ever since the accident (“eventually!”). To get out of the water – to feel gravity and non-symmetry again – is difficult and frustrating for her. <i>[The patient in addition describes deepened breath throughout and after the treatment and a great difference in perception when standing again (still inside the pool): straightened, symmetrical, relaxed.]</i> Floating devices left marks on thighs.</p>
Session 2	Cancelled	Elevated inflammation markers without detectable cause.
Session 3	Cancelled	Elevated inflammation markers without detectable cause.
Session 4	<p>Feedback about meanwhile, progress</p> <p>Treatment, video: <a href="http://boris.unibe.ch/id/eprint/92752">http://boris.unibe.ch/id/eprint/92752</a> Illustration of some of the movements described in the motion-sequence “Basic Flow”.</p> <p>Observations, feedback</p>	<p><b>No more restrictions in hip abduction / adduction from surgeon, 30kg weight allowed.</b> Patient is able to put on socks independently again. <i>[The patient additionally reports to no more depend on a handrail when walking stairs.]</i> Especially thigh, but also knee is less swollen than at first session. The patient reports pain on the medial side of the knee (is taped), and a tense feeling in her lower back. She is worried since her knee swelled in the aftermath of the last WATSU-session.</p> <p>Practice of body-perception while standing (comparing left and right side). WATSU: movements out of the motion-sequence “Basic flow” (“Basics”) <sup>23</sup>; “Seaweed”. Increasingly magnified movements of the trunk. Shoulder abduction up to 100°.</p> <p>Noticeable less fear, patient appears to be languorously relaxed. <i>[The patient additionally reports deepened breath throughout and after the treatment, and how much she enjoyed tractions and the therapist’s accuracy.]</i> Getting out of the water is less frustrating than last time.</p>
Session 5	Feedback about meanwhile, progress	<b>Hip flexion beyond 90° allowed.</b> The patient is severely frustrated from several days of swelling and pain in the knee after intense physiotherapy.

	<p>Treatment, video: <a href="http://boris.unibe.ch/id/eprint/92787">http://boris.unibe.ch/id/eprint/92787</a> Mobilization of joints can be performed directly by the therapist or indirectly utilizing drag.</p> <p>Observations, feedback</p>	<p>Perception of the breath and imagination of symmetric walking without pain. WATSU: all movements can be carried out a little bit larger and more intensely, especially “Basics”, “Seaweed”. Focus on neck / shoulders and lower back: mobilization and massages.</p> <p>Intense tremble of the right leg, and later the entire body, when back on land. Interpretation: stress-discharge of the autonomous nervous system. <i>[The patient additionally expresses joyful amazement concerning the re-discovery of her range of motion. She describes movements suspended due to the accident to feel “awesome” and “alien” upon re-encounter.]</i></p>
Session 6	<p>Feedback about meanwhile, progress</p> <p>Treatment, video: <a href="http://boris.unibe.ch/id/eprint/92790">http://boris.unibe.ch/id/eprint/92790</a> An experienced therapist is able to precisely control hip movements.</p> <p>Observations, feedback</p>	<p>The patient is still struggling with slow progress and increased pain.</p> <p>Walking in the water in several ways in order to re-establish symmetrical walking without crutches. WATSU: focus on legs and hips, and on easing tension of the shoulder-girdle. “Basics”, “Seaweed”.</p> <p>Impressive increase of confidence in walking (in the water) after a few minutes. The patient does not display protective tension when WATSU-movements are enlarged and traction is applied; she is obviously very relaxed.</p>
Session 7	<p>Feedback about meanwhile, progress</p> <p>Treatment, video: <a href="http://boris.unibe.ch/id/eprint/92791">http://boris.unibe.ch/id/eprint/92791</a> The term “massage” in WATSU refers to soft tissue-massage as well as to stimulation of acupressure-points.</p> <p>Observations, feedback</p>	<p>-</p> <p>Walking in the water with visualization of “roots” that grow deep into the ground with every step. Visualizing that the breath connects both halves of the body over and over again. WATSU: massage of the left foot possible for the first time due to extended range of motion. Rotations of the thorax, “Seaweed”. After an intense emotional release focus on resources: quietly touching the head, the area of the heart, the hands.</p> <p>When I was working on her right arm (after massage of her left foot) she starts crying with increasing intensity until she is drenched with tears. This abates and recurs several times. She reports to have felt sad, and also (for the first time since the accident) angry. <i>[The patient describes that she had realized how her focus had been solely on her injured leg for the longest time and that she had been overwhelmed by the detection of still having a rather perfect “rest” of her body.]</i> Interpretation: processing of the trauma by oscillation between resources and traumatic contents.</p>

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Session 8	Feedback about meanwhile, progress	<b>Weight allowed up to 45kg.</b> The patient walks 1.5 km per day, flexion of the knee improved. The patient was very tired for the entire week, but feels different (“whole”) ever since the last treatment.
	Treatment, video: <a href="http://boris.unibe.ch/id/eprint/92793">http://boris.unibe.ch/id/eprint/92793</a> Among others, mobility of spine and rib-cage is aimed at by rotational stretches.	Again practicing body-perception in the beginning. WATSU: “Basics”, “Seaweed”: emphatic lateral flexion and tractions of the thorax possible (left and right side), lots of work on the legs, massage of the foot. Gentle traction of the low back and 3-dimensional movements of the pelvis.
	Observations, feedback	The patient is breathing deeply and relaxed. <i>[The patient reports that she had – besides relaxing – observed closely whether there were any differences in how the two legs of her felt, or in the way movements continued on either half of the body. According to her, neither she nor the therapist noticed any difference.]</i>

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