

S1 Table. Individual patient information, surgery, adverse events and rehabilitation program

Subject: Gender Age Etiology Length Weight GMFCS	Surgery	Adverse events	Rehabilitation / additional treatment
1: female 10.6 years cerebral palsy 146 cm 46 kg GMFCS III	Both legs distal medial hamstring lengthening, adductor and psoas release; left leg: hemi-epiphysiodesis	Neuropathic pain after epidural painmanagement; morphine pump GMFCS III=> GMFCS IV	First 6 weeks: immobilization in knee extension brace left leg (23 hours per day); first half year three to four times a week physiotherapy including strengthening, mobilization, pain rehabilitation and hydrotherapy; second half year after surgery two to three times per week physiotherapy including training on parallel bars, transfers training and biking
2: male 12.7 years hereditary spastic paresis 136 cm 27 kg GMFCS III	Both legs distal medial hamstring lengthening and hemi-epiphysiodesis; right leg: exorotating femur osteotomy, endorotating tibia osteotomy and aponeurotic lengthening of triceps surae (Vulpus); left leg: aponeurotic lengthening of triceps surae (Vulpus) and triple arthrodesis foot; After one week of first SEMLS: triple arthrodesis right foot		First 6 weeks: no-weight bearing; immobilization in knee extension brace both legs (23 hours per day); Till half year after SEMLS four times a week physiotherapy including gait training, mobilization, and strengthening; after 12 weeks therapy included two times training in water; Eight months after SEMLS: Botuline toxin A treatment: psoas, adductors, rectus femoris, flexor dig. brevis and flexor dig. longus;
3: female 17.2 years cerebral palsy 154 cm 47 kg GMFCS III	Both legs distal medial hamstring lengthening and supracondylar extension osteotomy; Right leg: aponeurotic lengthening of triceps surae (Vulpus)		First 8 weeks immobilization in knee extension brace both legs (23 hours per day); inpatient rehabilitation nine weeks including gait training, mobilization, and strengthening; Till half year after SEMLS two times a week physiotherapy, then one time.
4: male 15.8 years cerebral palsy 151 cm 53 kg GMFCS II	Both legs distal medial hamstring lengthening three month prior to SEMLS; SEMLS: supracondylar extension osteotomy; patellar tendon shortening; both feet: fusion of calcaneocuboid joints		First 9 weeks: immobilization in knee extension brace both legs (23 hours per day); one hour mobilization and standing exercises; followed by knee extension brace for 2-3 hours and three sessions of physiotherapy every week, including gait training, mobilization and strengthening. After SEMLS: 12 weeks of inpatient rehabilitation. Two years after SEMLS: Rectus release both legs
5: female 11.2 years hereditary spastic paresis 151 cm 46 kg GMFCS II	Both legs distal medial hamstring lengthening and distal femoral anterior guided growth (hemi-epiphysiodesis)	Pain at growth plate at location of fixation plates till half year after surgery	First 12 weeks: immobilization in removable knee extension brace both legs (8 hours per night); combined with five times a week physiotherapy including gait training, mobilization, and strengthening. Till half year after SEMLS two times a week physiotherapy, then one time. Biking at five weeks after SEMLS.
6: male 15.2 years cerebral palsy 176 cm 61 kg GMCS III	Both legs distal medial hamstring lengthening; right leg hemi-epiphysiodesis, exorotating femur osteotomy, endorotating tibia osteotomy; Left leg: hemi-epiphysiodesis, triple arthrodesis foot; After four weeks of first SEMLS: triple arthrodesis right foot	Stage 4 pressure ulcer surgically treated	First 8 weeks: immobilization in knee extension brace both legs (23 hours per day); 6 weeks below-knee cast for mobilization, 8 hours per night knee extension braces, inpatient rehabilitation 12 weeks including gait training, mobilization, and strengthening; Till half year after SEMLS three times a week physiotherapy, then one time. Wheelchair sports training four times a week.