

CESAREAN DELIVERY REHAB PROTOCOL



Release Year: 2025 Jones et al.
Core Elevation Fitness and Wellness, INC
Enhanced Recovery After Delivery
Publisher: Pelvic Health Network, LLC

BACKGROUND

Cesarean deliveries are the most common surgery performed in the United States with an average rate of 1.3 million procedures annually. This nearly doubles the rate of knee and hip replacements per year. Unlike many elective and emergent surgeries, cesarean delivery recipients are not typically offered a rehab evaluation and recovery plan of care during hospital admission. The highest rates of complications after cesarean delivery occur during the first 6 weeks of post-surgical recovery. This rehab protocol is designed to be a guide and provide surgical recipients with a standard recovery plan of care under the supervision of their surgical team and licensed rehab professionals. This protocol should start during hospital admission and continue throughout the first year of postpartum recovery.

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DISCLAIMER

This Cesarean Delivery Rehab Protocol is a general framework for recovery and should be used as a guide by qualified professionals within their scope of practice and applicable regulations. It does not replace medical advice, diagnosis, or treatment from a licensed healthcare provider. Practitioners must assess each client's unique medical history, surgical outcomes, and recovery status before implementing or modifying any part of this protocol. Clients should consult their primary care provider, obstetrician, or relevant medical professional before beginning or changing their rehabilitation plan. The practitioner is responsible for ensuring all interventions are safe, evidence-informed, and tailored to the individual needs of each client.

Cesarean Delivery Rehab Protocol



Early Rehab Areas of Focus:

Screen: Sleep hygiene, mental health, pain, gait, sensation, incision and perineal care, transfers, fall risk, balance, toileting, lactation challenges, recovery and equipment needs

Patient education: Newborn holding, feeding, lifting, positioning, scar care. Abdominal binder wear during community walking and lifting activities. Core bracing & managing intra-abdominal pressure with lifting, laughing, coughing, toileting

Vitals: Monitor differences in vital signs at rest and activity

Walking: Gradually progress distances, surface inclines, and time per patient vital signs and activity tolerance

Referral: As needed based on findings from screening including Pelvic PT/OT for scar, core/pelvic floor assessment

Patient Name: _____

Patient's DOB: _____

Dr. _____

DOS: _____

Cesarean Rehab	Post-Delivery Weeks										
Incision & Core Protection	1	2	3	4	5	6	7-8	9-12	13-16	17-20	21+
Promote Healing <ul style="list-style-type: none"> Promote lying flat supine 											
Pain/Swelling Management Above and below the incision: <ul style="list-style-type: none"> Desensitization Abdominal massage 											
Mobility training <ul style="list-style-type: none"> Log roll/ bed mobility Sit to stand transfers Car transfers Walking progression 											
Abdominal Protection <ul style="list-style-type: none"> Wear abdominal binder Core bracing w/ pillow Avoid Valsalva & bearing down with activities Limit lifting/carrying over 10 pounds or more than the weight of the baby 											
Indirect Scar Mobility <ul style="list-style-type: none"> Trunk/Hip/Pelvic Mobility Exercises (e.g. Cat/cow, lateral trunk rotation) Prone lying 											
Muscle Activation & ROM	1	2	3	4	5	6	7-8	9-12	13-16	17-20	21+
Muscle Activation <ul style="list-style-type: none"> Diaphragmatic breathing, TrA, pelvic floor, gluteal activation 											
Active range of motion <ul style="list-style-type: none"> Pain-free trunk, pelvis, hip AROM/mobility 											
Restore upright posture <ul style="list-style-type: none"> Thoracic extension ROM Align spine against wall Counter presses 											

Cesarean Delivery Rehab Protocol



Patient's Name: _____

Patient's DOB: _____

Dr. _____

DOS: _____

Safe Return to Exercise/IADL Areas of Focus:

Screen: Vitals prn, mental health, pain, complete scar healing, Diastasis recti, PF dysfunction (leaking, pain, constipation, etc.) scar sensation, readiness to return to daily activities, work, exercise, jumping and running

Patient education: Abdominal binder weaning, self-scar massage, deep core and pelvic floor strengthening, abdominal pressure management, safe lifting mechanics, safe return to exercise

Strength/Cardio progression: Start at 25-50% of their pre-birth intensity and progress to 75-100% per individual tolerance/goals

Referrals: PT, OT, Run screen/coach, Mental health counselor, Massage therapist, Perinatal Trainer/Exercise specialist, Chiropractor, etc.

Cesarean Rehab	Post-Delivery Weeks											
Scar Mobility and Sensation	1	2	3	4	5	6	7-8	9-12	13-16	17-20	21+	
• Desensitize on, above, below the scar												
• Direct scar massage on, above, below the scar												
• Advanced mobilization with tools on, above, below the scar (e.g. cupping)												
Muscle Strength Training	1	2	3	4	5	6	7-8	9-12	13-16	17-20	21+	
Body weight strengthening												
• Posture (e.g. rows)												
• Bridges, side lying leg raise												
• Deep core and pelvic floor muscle strengthening												
Resistance training												
• Carrying over 10 pounds while walking (e.g. baby + equipment)												
• Resistance bands												
• Free weights												
• Yoga/Pilates												
Traditional core exercises												
• Standard planks, sit ups, flutter kicks, crunches												
Muscle Endurance Training	1	2	3	4	5	6	7-8	9-12	13-16	17-20	21+	
Walking												
• Walking on uneven surfaces/inclines/hiking												
Low-impact cardio												
• Stairmaster/elliptical												
• Cycling: Road/Gravel												
• Swimming												
Muscle Power Training	1	2	3	4	5	6	7-8	9-12	13-16	17-20	21+	
Begin higher impact activity												
• Jumping/Plyometrics*												
• Jogging/Running*												

*Perform Load and Impact Management Assessment In: Goom et al 2019 Return to Running Postnatal Guidelines

Cesarean Delivery Rehab Protocol



References

1. Abdominal Core Surgery Rehabilitation Protocol. Americas Hernia Society Quality Collaborative. 2019 (<https://achqc.org/uploads/resources/AHSQC-Abdominal-Core-Surgery-Rehabilitation-Protocol-Physical-Therapist-Guide-08-09-2019.pdf>).
2. Goom T, Donnelly G, Rockwell E. Returning to running postnatal – guidelines for medical, health, and fitness professionals managing this population. 2019 (<https://absolute.physio/wp-content/uploads/2019/09/returning-to-running-postnatal-guidelines.pdf>).
3. Lubczyńska, A., Garnarczyk, A., & Wcisło-Dziadecka, D. (2023). Effectiveness of various methods of manual scar therapy. *Skin research and technology : official journal of International Society for Bioengineering and the Skin (ISBS) [and] International Society for Digital Imaging of Skin (ISDIS) [and] International Society for Skin Imaging (ISSI)*, 29(3), e13272. <https://doi.org/10.1111/srt.13272>
4. Segraves RL, Segraves JM. Reducing Maternal Morbidity on the Frontline: Acute Care Physical Therapy After Cesarean Section During and Beyond the COVID-19 Pandemic. (<https://pmc.ncbi.nlm.nih.gov/articles/PMC7989147/>).
5. Segraves R, Croghan A, Coreas M, Locati E, Finley R. Initiating occupational and physical therapy in the hospital after birth: access, reimbursement, outcomes. *JWPHPT*. 2023. 47(1):p 26-35. (https://journals.lww.com/jwphpt/fulltext/2023/01000/initiating_occupational_and_physical_therapy_in.4.aspx).
6. Segraves R, Segraves J, Parr R, Samel E, Smith-Aldrick V. Maternal Health Disparities in Acute Care Rehabilitation. (<https://pubmed.ncbi.nlm.nih.gov/39178281/>).

Complimentary Recovery Resources for Patients/Clients

Cesarean Recovery & Safe Return to Exercise Guide. A downloadable guide designed to help C-section moms better prepare and recover from birth to 1+ year post Cesarean Delivery. Includes preparation check lists; Postpartum recovery timeline charts, rehab-fitness exercise videos, safe mobility & core protection demonstration videos, scar care & mobility instructions videos and Safe return to exercise guidelines for a faster, safer recovery. <https://www.coreelevationfitness.com/product/cesarean-recovery-and-safe-return-to-exercise-guide/>

Cesarean Recovery Must Have List. Free downloadable checklist of C-section recovery “must haves” <https://www.coreelevationfitness.com/c-section-recovery-must-have-list>

Post Abdominal Surgery Core Rehabilitation Program. An 8 Week rehab-fitness program designed to help women safely reintroduce movement and restore their posture, mobility, and strength after any major abdominal surgery including C-section, Diastasis or Hernia Repair, Tummy tuck, Hysterectomy, Myomectomy. Designed to decrease risk of injury or post-surgery complications. Follow-along workouts and core protection, scar care videos included. <https://www.coreelevationfitness.com/post-abdominal-surgery-core-rehabilitation-program/>

C-section Scar Workshop. This 90-minute virtual workshop recording provides scar care education and demonstrations of various indirect and direct scar mobilization, massage, cupping, and desensitization techniques. <https://www.coreelevationfitness.com/product/interactive-c-section-scar-workshop/>