

Application of Pelvic Floor Therapy for Reduction of Postpartum Urinary Incontinence

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Introduction

- **Stress Urinary Incontinence (SUI):**
 - Highly prevalent in the postpartum period, impacting quality of life
 - 2.5 fold increased risk of SUI with vaginal delivery
 - Can lead to other symptoms such as dyspareunia, anxiety & depression
- **Pelvic Floor Muscle Therapy (PFMT):**
 - This is the voluntary contraction, relaxation & strengthening of pelvic floor muscles
 - Noninvasive & accessible treatment option

Risk & Protective Factors

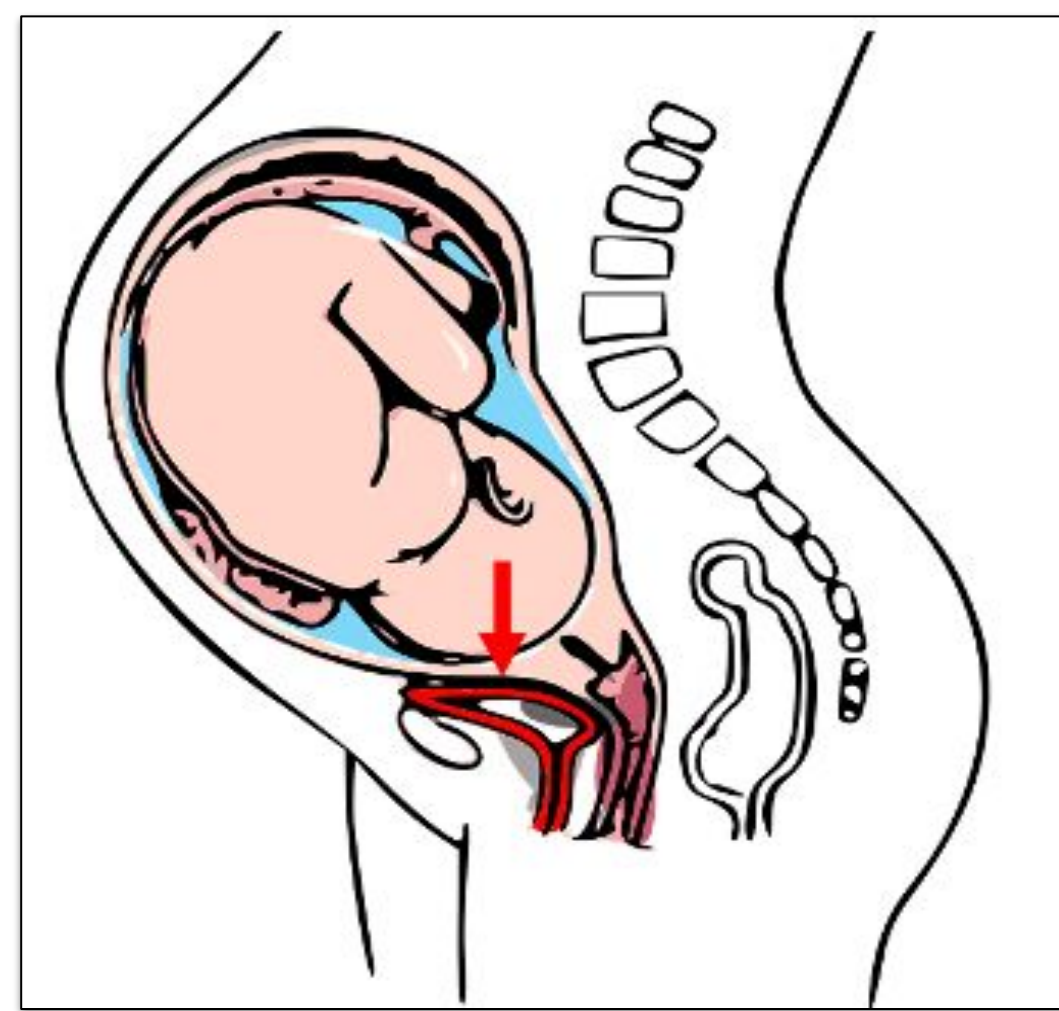
- **Risk Factors:**
 - Advanced Maternal Age
 - High-Risk Pregnancies
 - Vaginal Deliveries
- **Modifiable Risk Factors:**
 - Smoking Cessation
 - Weight Loss
 - Exercise
- **Protective Factors:**
 - Lower BMI
 - Cesarean Delivery

Conclusion

- **Patient Education:**
 - Patient-Provider Review
 - Discussing the normal and abnormal physiologic changes that are experienced during pregnancy at each gynecological visit
- **Screening:**
 - Use of Questionnaires
 - PFDI-20 and PFIQ
 - Recognition of Subtle Changes
 - Allows for earlier interventions and helps to prevent postpartum UI
- **Patient Centered Care:**
 - Increases Compliance with physical therapy

Pathophysiology

- **Pelvic Floor:**
 - Primarily consists of the coccygeus & levator ani muscles
 - Normal state of constant contraction that maintains support of bladder & reproductive organs
- **Postpartum Urinary Incontinence:**
 - Hormonal & physiologic changes of pregnancy soften these muscles and/ or ligaments
 - Combination of bodily changes & increasing pressure from a growing fetus lends to decreased muscle tone



PFMT Benefits

- **Increases Resting Tone & Strengthens Surrounding Muscles**
 - Yields quicker, more forceful contractions while bearing down
- **Increases Intraurethral Pressure & Immobilization**
 - Prevents descent of the urethra, a known contributor to developing UI
- **Elevates Bladder Position**
 - Reduces pressure to the bladder, decreasing symptoms of UI
- **Reduces Pubovisceral Length**
 - This is a wider, thinner portion of the *levator ani*
 - Reduction of length improves structural support of the pelvic floor
- **Closes the Levator Hiatus**
 - This is the opening that the urethra, vagina, & rectum pass through
 - Closure counteracts intraabdominal pressure imparted by a growing fetus

Intervention

- **Pelvic Floor Muscle Therapy (PFMT)** is the voluntary contraction, relaxation, & strengthening of pelvic floor muscles
 - Optimal results found when working with a physical therapist (PT) to teach & enforce proper technique
- **Sample Protocol:**
 - A set of 10 pelvic floor contractions with a 7-second hold each followed by a 10-second rest
 - One or more sets of exercises per day, at least several days of the week, for at least 8 weeks
- **Alternative Practices:**
 - Pilates → utilizes the same muscles as PFMT

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Takeaways

- **Patient-Provider Discussions:**
 - Address Modifiable Risk Factors
 - Reduces the prevalence of UI
 - Advises patients when to seek help
- **PFMT Education:**
 - In-Office or Telehealth Visits
 - Solving problems that are associated with time commitment and/or transportation
- **Limitations:**
 - Increased Time in Discussing Patient Education
 - Potential Solution: Information Pamphlets
 - No guarantee that the information will be read or understood, nor does it allow patients the ability to ask any additional questions

Disadvantages & Barriers

- **Lack of Patient Education:**
 - Lack of Knowledge about Pelvic Floor and Sexual Function
 - Improper Technique
 - Should be taught by a physical therapist to prevent future complications or injuries
 - i.e. Bladder or Kidney Damage
- **Protocol:**
 - Lack of Standard PFMT Treatment Plans
 - Lack of Adherence
 - Issues with scheduling, finances, or access to transportation
- **Lack of Patient Comfortability:**
 - May prevent patients from seeking care
- **Health Insurance:**
 - Lack of Coverage
 - Dependent on PFMT modality or total number of visits
 - Co-pays