

Physical Therapy Management of a Patient with Dyspareunia and Scoliosis: A Case Report

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ABSTRACT

Background and Purpose: Musculoskeletal dysfunction may cause dyspareunia. Scoliosis can be worsened by existing musculoskeletal problems. This report describes a global physical therapy approach which led to relief from dyspareunia.

Case Description: A 69 year old woman with dyspareunia, poor hip flexibility and a thoracolumbar scoliosis was treated with a combination of Myofascial Release (MFR), therapeutic exercises, patient education and a home program. Both partners were educated on alternate positions for intercourse.

Outcomes: The patient engaged in intercourse without vaginal pain after 6 treatments. The patient's flexibility and biomechanical issues improved within 9 visits. She returned to sexual intercourse without pain or flexibility issues.

Discussion: This report demonstrates that a global Physical Therapy approach based on a complete diagnosis of all musculoskeletal dysfunctions in the patient, along with education of the sexual partner, can successfully resolve the symptoms of dyspareunia. Such results provide important implications for future PT management to enhance the effectiveness of treatment for patients with dyspareunia.

INTRODUCTION

dyspareunia

Dyspareunia is defined as pain before, during or after intercourse (Messelink et al 2005) and current reviews indicate that as many as 50% of women experience pain in the pelvis with intercourse (Wrobel 2008). Despite this prevalence, the problem is commonly overlooked, deterring many from engaging in sexual activity (Prather 2007).

There are many causes for dyspareunia including musculoskeletal dysfunction, endometriosis, pelvic inflammatory disease, vaginitis, vulvar atrophy, post-op scarring, adhesions, and others (Wurn et al 2005, Heim 2001). Patients experiencing dyspareunia from musculoskeletal dysfunctions may present with associated joint mobility issues, muscle pain and tension of the pelvic floor muscles. Besides pain with intercourse, their symptoms include perceived heaviness of the rectal and vaginal area, pain at rest or on examination and coccyx pain. Upon examination, shortened pelvic floor muscles may be hypertonic and tender (Fitzgerald and Kotarinos 2003a). To effectively treat dyspareunia, intervention must consider 3 factors in parallel, the underlying condition responsible for the pain, the secondary muscle reactions that may become a continued source of pain, and the psychosocial effects on the client (Learman 2005).

Patients with a musculoskeletal dysfunction as the cause of their dyspareunia are often referred to physical therapy for treatment. Interventions may include manual therapies such as trigger

point release, joint and soft tissue mobilization, patient education, biofeedback, vaginal dilators, modalities and exercise. Practice surveys of women's health physical therapists indicate that 70% of these therapists are addressing treatments at the pelvic floor, pelvic girdle and associated pelvic structures (Hartmann et al 2007). Fisher reported an effective intervention of a client with dyspareunia through treatment of overactive levator ani muscles (Fisher 2007), while Fitzgerald and Kotarinos' (2003b) description of rehabilitation of the short pelvic floor muscles has become well known as a successful method.

myofascial release

Musculoskeletal pain may be due to the presence of myofascial trigger points (MTrP) or myofascial pain syndrome of the abdomino-pelvic region (Fitzgerald and Kotarinos 2003a). Travell describes an MTrP as a hyper-irritable spot, usually within a taut band of skeletal muscle or in the muscle's fascia. The spot is painful on compression and can give rise to characteristic referred pain, tenderness, and autonomic phenomena (Travel and Simons 1992). Muscles affected with trigger points are typically short and weak, demonstrating early fatigue and delayed relaxation. Relief can be obtained through manual stretching and through trigger point release (Weiss 2001). Anderson, Wise, et al (2005) reported a 72% clinical success rate among their male patients treated for chronic pelvic pain using myofascial trigger point release combined with paradoxical relaxation training treatment (MFRT/PRT) (Anderson et al 2005).

The John F. Barnes method of myofascial release (MFR) is a hands-on approach of treatment aimed at facilitating release of fascial restrictions. The components of fascia are collagen, elastin,

and a polysaccharide gel complex or ground substance. In response to trauma, the ground substance solidifies, collagen develops cross links, and the elastin loses its resiliency (Barnes M 1996). Such changes become a source of pain and tension. Fascial restrictions can pull with up to 2000 pounds/square inch. These high tensile forces have the potential to alter skeletal alignment resulting in poor joint biomechanics, altered length-tension ratios of the muscles and therefore inefficient muscle function (Barnes J 1996; Stecco 2004).

The myofascial release practitioner performs this technique by applying a gentle pressure to the restriction for a minimum of 90-120 seconds. As the tissue releases, the practitioner maintains the pressure and follows the release three dimensionally through the next barrier (LeBauer et al 2008). It is believed that 90-120 seconds is required for the tissue to undergo histological length changes. Restoration of length to the fascial system relieves pressure from pain sensitive structures, elongates the connective tissues and allows for restoration of alignment and mobility to the joints (Barnes J 1996; Day et al 2009).

scoliosis

Scoliosis involves a lateral curvature of the spine and a tilt of the pelvis laterally in response to the associated tightened soft tissues on the concavity of the curve (Kendall et al 2005).

Impairments from scoliosis include altered posture, associated muscle tension, poor tissue extensibility, functional limitations and low back pain. Traditional physical therapy provides

guidelines for treatment of dysfunctions and limitations due to scoliosis, although most treatment is sought to address pain.

Review of the literature does not reveal an impact of scoliosis on intercourse, however, the multifactorial presentation of this client with scoliosis, poor hip flexibility, and dyspareunia led this therapist to devise a global approach toward a comprehensive correction of musculoskeletal dysfunction. The program included numerous physical therapy treatments based on guidelines from the Section on Women's Health of the American Physical Therapy Association, as well as extensive myofascial release (MFR) to restore balance in the pelvic girdle and improve the length-tension ratio of the trunk and pelvic musculature (Pauls and Shelly 1999). This case report demonstrates that a comprehensive approach to evaluation and treatment may enhance the effectiveness of intervention for dyspareunia.

CASE DESCRIPTION

History

The patient was a 69 year old married woman who was self referred to physical therapy. Her chief complaint was dyspareunia or painful intercourse. She reported that upon penetration her pain was deep in the vagina. She also complained of hip pain with intercourse when she assumed a position of combined hip flexion, abduction and external rotation. The patient had not engaged in intercourse for 14 years prior to her first PT appointment due to a dispute with her husband. They both desired reconciliation, and after they attempted to engage in intercourse and

discovered that her pain prevented the activity, the patient sought out physical therapy for her dyspareunia.

The patient's OB/Gyn history included 2 live births which were vaginal deliveries. Her Medical history included a structural scoliosis (left thoracic, right lumbar), with DJD of the right hip. She had a history of cortisone injections in the right hip to alleviate the pain. She had experienced lack of sleep and loss of weight over the last year due to marital problems. She also reported a history of GERD, hysterectomy, and asthma. Medicines listed were Singulair, Nexium, Plavix and Norvasc. Overall, she reported that she was in good health.

Review of Systems

Reviews of the neurologic, cardiopulmonary, and integumentary systems were unremarkable.

Test and Measures

The patient was given 3 outcome measures upon initial evaluation. She rated her pain as 10 of 10. On the Vulvar Pain Functional Questionnaire (VQ), she scored a 5 out of a possible 33. A lower number on this scale indicates a greater pain level. She was evaluated with the NIH-Chronic Prostatitis Symptom Index (NIH CPSI). On the pain domain, she scored 10 and indicated that her pain was below her pubic area and she experienced pain during or after sexual climax. For urinary symptoms she scored 1, and for quality of life she scored 5 and indicated that she was mostly dissatisfied with her symptoms. Her NIH-CPSI total score was 16.

Musculoskeletal assessment review began with observation of the patient's posture in standing. She was observed from the anterior, lateral and posterior views. According to McGee, the pelvis is usually the key to proper back posture (McGee 2008). Observation of the pelvis revealed the right ileum was higher than the left ileum. The client's spine was laterally curved to the right in the thoracic region and to the left in the lumbar region. Her right rib cage appeared more caudal making the right waist appear compressed. The client's scoliosis remained present on forward flexion. These findings were consistent with a right thoracic, left lumbar structural scoliotic curve (Kisner and Colby 2007). ASIS was palpated and found to be lower on the right, and the PSIS was higher on the right. The patient was then observed in supine and prone. Palpation of bony landmarks of the lumbar spine, pelvis and sacrum was performed to assess symmetry. The right ASIS was more caudal relative to the left. The right PSIS was more cranial relative the left. These findings indicated an anteriorly rotated right ileum.

The exam then focused on the lumbar spine, sacroiliac and hip joints. Lumbar active ROM was full in flexion. Extension was uncomfortable. Repeated extension increased her discomfort level. Repeated flexion was pain free. It was determined that she had a bias for lumbar flexion. Segmental lumbar mobility was also limited. Results from measurements of the active range of motion of the hips are shown in table 1.

Passive flexibility of the hips was determined by moving the hips into combined flexion, abduction, external rotation. A limitation of 50% was found in the left hip relative to the right. Manual muscle testing (MMT), as described by Daniels and Worthingham (1986), of the bilateral

hip muscles indicated hip weakness. Gluteus Medius strength was 3+ on the right and 4+ on the left. Bilateral piriformis tenderness was present.

An internal pelvic floor muscle (PFM) assessment was then performed. Written consent for evaluation and treatment of the pelvic floor had been obtained when the patient filled out the initial paperwork since her chief complaint was that of dyspareunia. The examination was performed in the supine hook lying position. Palpation of the external PF musculature was unremarkable. The examination then continued internally through the vagina using palpation with one digit (Bo and Sherburn 2005). Palpation of the levator ani and the obturator internus muscles reproduced the pain she had experienced during intercourse. Pelvic floor muscle strength was not assessed since patient did not present with symptoms associated with PFM weakness.

Evaluation/Diagnostics

The examination revealed a right trunk compression, poor hip flexion and asymmetry of motion, pelvic floor tension and MTrP in the PFM. It was hypothesized that her scoliosis created abnormal posturing which affected spinal and pelvic floor muscle length. Treatment was directed at correction of the scoliosis and pelvic tilt by alteration of the fascial tension in the trunk and pelvis. ICD 9 codes used were 729.5, limb pain and 728.85, muscle spasm. Treatment frequency was set for 2-3 times per week.

Prognosis was listed as “Good” since the patient was in good health, was highly functional despite her pelvic pain, and was greatly motivated to succeed. Expectations were that the patient could achieve her goal of pain free intercourse within the next 30 days.

Intervention

During the first appointment, the initial evaluation was performed and the book Sex and Back Pain, by Hebert (Hebert 1997) was reviewed with the patient. She was taught to perform lower extremity stretches for the hip region based upon myofascial release principles as described by Stedronsky et al. (2006). The stretches included the FABER stretch (combined flexion, abduction, external rotation), Hamstring elongation, and double knee to chest. She was instructed to hold all stretches for 90-120 seconds. Deep breathing with a mental focus on the breath flowing into the muscles was emphasized during the stretch. She was asked to take the stretch to the beginning of the barrier and hold. As the barrier released, she was instructed to sink further into the stretch until she felt the next barrier. This method was also included in the home exercise program.

On the second and successive visits, treatment consisted of manual therapy, a gym program and patient education. Details of daily findings and treatment are shown in Table 3. Myofascial Release techniques as described by Barnes (1990) were often employed and included the use of DeJarnette blocks manufactured by Sorsi. Pilates exercises, as well as core stabilization exercises as described by Sahrman (2001), were major components of the gym program.

To determine proper continued treatment, the position of the pelvis was assessed and monitored at the beginning and end of each session. Neville (2008) describes the pelvic ring as “the foundation of the house” and proposes that a key component to proper pelvic floor muscle function is restoration and maintenance of optimal pelvic ring alignment. Because a leg pull releases fascial restrictions in the right lower quadrant, the lower extremity, and into the pelvis (Barnes, J 1992), this myofascial release technique was used to restore alignment and balance to the pelvis. Additionally, DeJarnette blocks were used numerous times in treatment, both in prone and supine as described by Barnes (1992), to reposition the pelvis.

The client was receiving treatments 2-3 times a week, thus self care was mandated and the patient was instructed to perform daily pelvis balancing exercises to assure proper joint alignment and mobility. On the fourth visit, the patient reported decreased pain with penetration, but continued biomechanical difficulties with intercourse due to her poor hip ROM and pain. On her sixth visit, the patient reported that hip pain and poor ROM were her only limitation to intercourse. She had no penetration pain. The patient was scheduled for a 16 day vacation. She was instructed to perform her hip stretches daily while away.

When the client returned to the clinic, she complained of right sided low back pain. She was treated 3 additional times with MFR and altered her home program to include self mobilization techniques. When she was discharged on the 9th visit, she reported no internal pain with intercourse. She simply had hip pain. The patient’s hip ROM measurements were taken and are shown in table 2.

Outcomes

The patient completed her course of therapy in 9 visits with complete resolution of her dyspareunia.

Initial scores on outcome measures compared to final scores were excellent. The patient's initial dyspareunia rating was 10 of 10; after completion of treatment her rating was 0 of 10.

Unfortunately, the client failed to return her final VQ index; an index which is known to demonstrate excellent test/retest reliability and internal consistency (Hummel-Berry et al 2007).

However, the NIH-CPSI is a well accepted tool for the evaluation of patients with chronic pelvic pain syndrome. It has been found to have high reliability and construct validity as a tool to quantify pelvic pain syndromes (Litwin et al 1999). The patient's original NIH-CPSI score was 16, her final score was 0.

Low back pain had become the patient's chief complaint after her 16 day hiatus. This patient was later evaluated for low back pain and a new plan of care was formulated. During those 13 treatments, she experienced no dyspareunia and reported an active sex life. The client was contacted 9 months after discharge from her original diagnosis. She reported revitalization in her marriage and her relationship with no recurrence of sexual dysfunction or low back pain.

DISCUSSION

The patient's goal of pain free intercourse was achieved. Thus, the purpose of this case report is to describe the successful global physical therapy approach to treatment of a patient with dyspareunia and scoliosis. This subject demonstrated a scoliosis with a pelvic obliquity, abnormalities which co-exist. The PT assessment and thus basis of her treatment was that her dyspareunia was due to the abnormal length tension ratio of the pelvic floor muscles and hip rotators caused by the pelvic asymmetry. The importance of this case lies in the therapist's recognition of the relationship of the primary complaint of dyspareunia to the concurrent pelvic obliquity; a diagnosis which led to a successful outcome for this patient.

By using manual therapy techniques to level her pelvis, it was theorized that there would be a reduction in abnormal tension. Internal myofascial release was used to treat the shortened pelvic floor, and muscle re-education was provided to create structural stability. However, according to Kendall, a lateral pelvic tilt can occur from unilateral muscle weakness in the hip abductors, specifically in the gluteus medius; the weakness allows the pelvis to rise on the ipsilateral side (Kendall et al 2005). Manual therapy techniques had been used to rebalance the pelvic alignment and restore the length tension relationship of the pelvic floor muscles. Following Kendall's theory, facilitation of the gluteus medius through a strengthening program and muscle re-education enhances the pelvis leveling. Thus, the goal of this patient's gym program was to facilitate the proximal hip musculature, namely, the abductors, in maintaining the pelvis leveling. Because strength was not a primary concern in this case, whether the gym program provided improved gluteus medius strength or simply promoted muscle facilitation was not a concern.

More studies could be done to determine if the pelvis can become symmetric solely through a gluteus medius strengthening program.

The patient's husband was treated concurrently at our clinic for his back pain beginning on his wife's 5th visit. The couple was trying to reconcile their relationship issues and both partners were educated on alternate positions for intercourse. Thus, it is possible that the husband's positive involvement in the patient's rehabilitation may have been a psychological component contributing to the patient's symptomatic relief and thus to a successful outcome for this patient. Support for this idea was seen in a study by Meane in which less pain was reported by those women with dyspareunia whose relationships were satisfactory (Meane et al 1998).

STUDY LIMITATIONS

A causal relationship between the use of MFR and the relief of dyspareunia cannot be established on the basis of this case report, as the patient may have responded well to a different therapeutic approach. Indeed, evidence for the efficacy of MFR is scarce. The decision to use extensive MFR in this case was based on the clinical experience of this therapist. Significantly, the positive outcome of this case serves as evidence for the effectiveness of MFR for a patient with soft tissue restrictions.

Current literature indicates that the optimal duration of stretch is inconsistent. It seems that 30 seconds may be the preference in the rehabilitation settings while in the sports realm, shorter duration stretches of 10 seconds are the most commonly practiced (Bandy and Irion 1994).

Barnes suggests that it takes 90-120 seconds for the viscoelectric properties of fascial tissue to undergo changes in length. He argues that myofascial release principles are based on exerting a low load over a long duration to effectively alter the state of the ground substance from a solid back to a gel and thereby restore length and health to the tissue. He proposes the need to perform fascial tissue stretch at a rate slow enough that the tissue tolerance to the load is not exceeded (Barnes M 1996). The protocol used for stretches in this case follow the myofascial principles of a low load over a long duration. It is unknown what effect a shorter duration of stretch may have had on the outcome of this case. Further research is needed to determine the effects of a stretch held for 90-120 seconds on the changes in fascial tissues.

Disruption of the homeostasis in a body, even if the original position was not optimal, may cause pain in other areas. The corrected pelvis position improved the length tension ratio and muscle pain of the pelvic floor leading to resolution of her dyspareunia. However, the onset of low back pain in this client was not anticipated. It is uncertain if her back pain was due to our treatments or due to an occurrence while the patient was on vacation.

CONCLUSIONS

It is known that Physical Therapy intervention can significantly improve one's functional level and quality of life when addressing issues of pelvic pain. Intervention for dyspareunia in this case included treatment of scoliosis with the associated trunk muscle shortness and weaknesses, balancing the musculoskeletal dysfunctions of the pelvis, addressing the short pelvic floor muscles and the unique biomechanical issues that affected the patient's comfort during

intercourse. Furthermore and of significance, this case report underscores the value of a thorough physical examination to identify all of the components affecting the patient's functional limitations. Finally, the successful outcome of this case emphasizes the importance of a global PT program including extensive MFR techniques and the education of the sexual partner when treating patients with dyspareunia.

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REFERENCES

- Anderson R., Wise D., Sawyer T., et al., 2005. Integration of myofascial trigger point release and paradoxical relaxation training treatment of chronic pelvic pain in men. *J Urolo* 174,155-160.
- Bandy W.D., Irion J.M., 1994. The effect of time on static stretch on the flexibility of the hamstring muscles. *Physical Therapy* 74, 845-852.
- Barnes J.,1996. Myofascial release and treatment of thoracic outlet syndrome. *Journal of Bodywork and Movement Therapies* 1(1), 53-57.
- Barnes J., 1992. *Fascial Pelvis; Myofascial Osseous Release*. Rehabilitation Services, Inc., Paoli.
- Barnes J., 1990. *Myofascial Release: The Search for Excellence*. Rehabilitation Services, Inc., Paoli.
- Barnes M., 1996. The basic science of myofascial release. *Journal of Bodywork and Movement Therapies* 1(4), 231-238.
- Bo K., Sherburn M, 2005. Evaluation of female pelvic-floor muscle function and strength. *Physical Therapy* 85 (3), 269-282.
- Day, J.A., Stecco, C., Stecco,A., 2009. Application of fascial manipulation technique in chronic shoulder pain - anatomical basis and clinical implications. *Journal of Bodywork and Movement Therapies* 13, 128-135.
- Daniels and Worthingham, 1986. *Muscle Testing; Techniques of Manual Examination*, 5th edition. W.B. Saunders, Philadelphia.
- Fisher K., 2007. Management of dyspareunia and associated levator ani muscle activity. *Physical Therapy* 87 (7), 935-941.

- Fitzgerald M.P., Kotarinos R., 2003a. Rehabilitation of the short pelvic floor I: Background and Patient evaluation. *International Urogynecological Journal* 14 261-268.
- Fitzgerald M.P., Kotarinos R, 2003b. Rehabilitation of the short pelvic floor II. Treatment of the patient with the short pelvic floor. *International Urogynecological Journal* 14, 269-275.
- Hartmann D., Strauhal M.J., Nelson C.A., 2007. Treatment of women in the United States with localized, provoked vulvodynia: practice survey of women's health physical therapists. *Journal of Reproductive Medicine* 52 (1), 48-52.
- Hebert L., 1997. *Sex and Back Pain*. Impacc USA, Greenville.
- Heim L.J., 2001. Evaluation and differential diagnosis of dyspareunia. *American Family Physician* 63, 1535-1544.
- Hummel-Berry K., Wallace K., Herman H., 2007. Reliability and Validity of the Vulvar Functional Status Questionnaire (VQ). *Journal of the Section on Women's Health*. 31 (3), 28-33.
- Kendall F., McCreary E., Provance P., et al., 2005. *Muscles Testing and Function with Posture and Pain*, 5th edition. Williams & Wilkins;. Baltimore.
- Kisner C., and Colby L., 2007 . *Therapeutic Exercise Foundations and Techniques*, 5th edition. F.A. Davis, Philadelphia.
- Learman L., 2005. Chronic Pelvic Pain, part 2, an integrated management approach. *Johns Hopkins Advanced Studies in Medicine*. 5 (7), 360-366.

- LeBauer A., Britalik R., and Stow., K. 2008. The effect of Myofascial Release (MFR) on an adult with idiopathic Scoliosis. *Journal of Bodywork and Movement Therapies* 12: 356-363.
- Litwin M.S., NcNaughton-Collins, M., et al., 1999. The National Institutes of Health Chronic Prostatitis Symptom Index: development and validation of a new outcome measure. *Journal of Urology* 162, 369-375.
- McGee D., 2008. *Orthopedic Physical Assessment*. Saunders Elsevier, St Louis.
- Meane M., Binik Y., et al., 1998. Affect of marital adjustment in women's rating of dyspareunic pain. *Canadian Journal of Psychiatry* 43, 381-385.
- Messelink B., Benson T., Berghmans B., Bo K., et al., 2005. Standardization of terminology of pelvic floor muscle function and dysfunction" report from the pelvic floor clinical assessment group of the International Continence Society. *Neurourology and Urodynamincs* 24, 374-380.
- Neville C., 2008. An interdisciplinary approach to treatment of a patient with chronic pelvic pain following gall bladder surgery: A case report. *Journal of Women's Health Physical Therapy* 32 (2), 24-34.
- Pauls J., and Shelly E., 1999. Applying the guide to physical therapist practice to women's health physical therapy. *Journal of the Section on Women's Health* 23 (3), 8-12.
- Prather H., 2007. Recognizing and treating pelvic pain and pelvic floor dysfunction. *Physical Medicine Rehabilitation Clinics North America* 18 (3), 477-96, ix.
- Sahrman S., 2001. *Diagnosis and Treatment of Movement Impairment Syndromes*. Mosby, New York.

- Stecco , L.,2004. Fascial Manipulation. Piccin Ed, Padova.
- Stedronsky Morton J., Pardy B., 2006. Myofascial Stretching. Aardvark Global Publishing, Greenwood Village.
- Travel J., Simons D., 1992. Myofascial Pain and Dysfunction: The Trigger Point Manual Vol. 2. Williams and Wilkins, Baltimore.
- Weiss J.M., 2001. Pelvic floor myofascial trigger points: Manual therapy for interstitial cystitis and the urgency-frequency syndrome. Journal of Urology 166, 2226-2231.
- Wrobel B., 2008. Assessment of painful sexual intercourse occurrence among women in gynaecological practice. Gynecology Poland 79 (11), 762-7.
- Wurn L., Wurn B., et al., 2004. Increasing orgasm and decreasing dyspareunia by a manual physical therapy technique. Medscape General Medicine 6 (4) 47.

TABLES

Table 1 Hip PROM pre treatment

Hip ROM	Left	Right
Internal Rotation	20°	30°
External Rotation	35°	25°
Flexion (SLR)	60°	70°
Abduction	40°	25°
Extension	10°	15°

Table 2 Hip PROM post treatment

Hip motion	Left	Right
Internal Rotation	25°	30°
External Rotation	30°	25°
Flexion (SLR)	65°	75°
Abduction	30°	25°
FABER	Limited by 25%	Limited by 50%

Table 3 Summary of Findings and Treatment Plan

Findings	Non Gym Treatment	Gym program
<p>Day 1 Poor hip ROM bilaterally, Pelvic pain : shortened PFM namely levator ani and obterator internus, Poor Lumbosacral mobility, ThoracoLumbar scoliosis</p>	<p>Initial Evaluation Pt. Education “ Sex and Back Pain” Book</p>	<p>Active LE stretches: (90-120 seconds each) Hamstrings, figure 4, butterfly, SIJ, Lateral Trunk, Double Knee to chest (knees apart)</p>
<p>Day 2 Right anterior ileal rotation, right upslip PFM Trigger points at Levator Ani and Oburator Internus</p>	<p>Pelvic blocks for right anterior ileum, MFR: Right lateral trunk release Lumbosacral decompression, leg pull, MTrP release: internal PFM Releases Obterator Internus, Hot pack 10’</p>	<p>Stretches as on Day 1</p>
<p>Day 3 Right upslip, right anterior ileal rotation. Levator Ani Trigger points</p>	<p>PROM of both hips (flexion, ER, Abduction 20 repetitions each). Pelvic blocks for right anterior ileum; MFR: right lateral trunk, lumbosacral release, MTrP releases at right levator ani. Hot pack 15’</p>	
<p>Day 4 Poor hip ROM Pelvic Floor trigger points</p>	<p>PROM both hips as on day 3. Passive SLR of LE’s MTrP releases of levator ani and obturator internus</p>	<p>Pulley Tower: hip circles, scissors, reverse bicycle, hip extension to neutral, 25 pounds, 20 reps each. Pilates Reformer: In and Outs</p>

Day 5 Right upslip and right anterior ileum Pelvic Floor Muscle Trigger points	Pelvic Blocks for right anterior ileum MFR: lumbosacral release, right lateral trunk, MTrP: levator ani and obterator internus	As on day 4 Added Bent Knee Fall Outs 10 each leg.
Day 6 Myofascial tension at right lateral trunk, pelvic girdle, and low back	MFR: lumbosacral release Mutifidi and erectors, bilateral leg pulls, right lateral lumbar and lateral trunk Hot pack 15'	As on Day 4 Added Butterfly stretch (90-120 seconds)
Day 7 Right quadratus lumborum tenderness, right upslip, right anterior ileum, low back fascial tension	Pelvic blocks for right anterior ileum MFR: right lateral trunk, erectors, piriformis, posterior thoracics and lumbar. Hot pack 15'	As on day 4 Added 4" yellow ball to Quadratus lumborum, gluteals, multifidi 90-120 seconds/area.
Day 8 Right upslip and anterior ileal rotation	Pelvic Blocks for right anterior ileum, MFR: piriformis, lumbosacral release, posterior and lateral trunk, erectors. Hot pack 15'	As on day 4 LE stretches (90-120 seconds) butterfly, figure 4, SIJ Reformer: In and outs, leg circles, froggies
Day 9 Right anterior ileum	Pelvic blocks for right anterior ileum. Interferential electrical (80-120 Hz) stimulation with hot pack 15' to lumbosacral region.	LE stretches: (90-120 seconds) figure 4, SIJ, hamstrings Reformer: In and Outs, leg circles, froggies, standing push backs, 4 way SLR 10 each leg, each direction.