WEBINAR OBJECTIVES
GERIATRIC WORKFORCE ENHANCEMENT PROGRAM (GWEP) 9/27/19

- Discuss pelvic floor musculature
- Define Pelvic Floor Physical Therapy (PFPT) and identify appropriate patients
- Identify compliancy barriers: PFPT from the patient’s perspective
- Familiarize clinicians with conditions affecting the pelvic floor and bladder
- Investigate research and evidenced-based medicine supporting PFPT
- Understand the two types of Kegel exercises for up-training (strength) or down training (pelvic pain)
CREATING UNDERSTANDING

- Incontinence is a natural part of aging
- Incontinence after childbirth is normal
- Nothing can be done to change incontinence
- Waking up to urinate every night is normal
- It is normal for intercourse to cause significant pain
HOW TO JOIN
“POLL EVERYWHERE” QUESTIONS

• Open a new text

• Text “To”: the number 22333
  • In the message line, type LEAHTOBEY999 (not case sensitive)
Have you heard of physical therapy for pelvic floor problems? (PFPT)

Yes, I have!

No, I'm not familiar.
PFPT: PELVIC FLOOR PHYSICAL THERAPY

OUR MISSION

• We provide evidence-based physical therapy interventions while promoting lifelong musculoskeletal health

• Treatment emphasis is placed on patient education, home exercise and symptom management. Our goal is to restore function and return our patients back to social, home and leisure activities with as little pain and/or deficit as possible
In 1 or 2 words, what comes to mind when you think of pelvic floor or PF physical therapy?
INTRODUCTION

PELVIC FLOOR PHYSICAL THERAPY (PFPT)

• What is it?
  • Effective & beneficial treatment

• Why should I know?
  • Considered 1st-line treatment conservative management
  • Patient empowerment
    • Crucial for patient quality of life & confidence beyond our office doors

• Barriers?
  Stigmas, Hesitancy, Compliancy, Intimately personal

• 2014 Cochrane Review found high quality evidence to support pelvic floor muscle training as the 1st line treatment for stress & mixed UI in women.
PELVIC FLOOR

• The **pelvic floor** is a bowl-shaped or hammock with several layers of muscles that cover the bottom of the pelvic cavity
  • The muscles are located between the pubic bone and the tailbone

• YouTube Video:
  https://youtu.be/wOjo5tBWoZo

• Pelvic floor muscle exercises are known as **Kegel exercises**
• Medical research indicates that after brief verbal or written instruction only **49% of women can correctly contract these muscles**

PELVIC FLOOR ANATOMY

• Urogenital triangle: Layer 1 & 2

• Colorectal triangle: Layer 3
PELVIC FLOOR FUNCTIONS

1. **Supports** the spine, pelvis and internal organs
2. **Sphincter control**: controls the bladder & bowel muscles
3. **Sexual**: enhance appreciation

PELVIC FLOOR REHAB

• Consultation
  • Comprehensive history
  • Patient education: lifestyle modifications
• PFM external examination
• Bowel and bladder evaluation & retraining
• Dietary & food considerations (low-acid diet PRN constipation)
• Visit 2: Internal/external Exam & “Urinary/Anal Muscle. Study” with EMGs”
• Pelvic joint alignment & movement activities that could cause symptoms

EXAMINATION

• Internal/External Exam:
  • Used to identify correct contraction and relaxation techniques
  • Identify trigger points and muscle spasms
  • Identify significant weakness or severe organ prolapse
  • Muscle symmetry or myofascial restrictions

• Urinary/Anal muscle study/Biofeedback:
  • Training uses sensitive computerized equipment that enables you to see and hear how muscles are responding to your instructions
  • Resting activity will be evaluated as well as muscle endurance and response to commands
  • Sensors are used to monitor muscle activity of pelvic floor

Table 2. Manual muscle testing grading scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No response</td>
</tr>
<tr>
<td>1</td>
<td>Flicker</td>
</tr>
<tr>
<td>2</td>
<td>Weak contraction</td>
</tr>
<tr>
<td>3</td>
<td>Moderate contraction, some degree of lift</td>
</tr>
<tr>
<td>4</td>
<td>Good contraction, against some resistance</td>
</tr>
<tr>
<td>5</td>
<td>Normal muscle contraction, strong squeeze, and lift</td>
</tr>
</tbody>
</table>

Currently there is no standardized method of grading PFM tone but this guide is the most commonly used. There is however, reported high reliability and diagnostic agreement among PTs in diagnosing pelvic floor pathology.

PELVIC FLOOR MUSCLE WEAKNESS

- Urinary or fecal incontinence:
  - Stress
  - Urge
  - Mixed
  - Functional
- Pelvic organ prolapse:
  - Cystocele
  - Urethrocele
  - Rectocele
1st Type of Kegel: Endurance (Slow Twitch)

Need Strengthening Program:

- Urinary or fecal incontinence:
  - Stress
  - Urge
  - Mixed
  - Functional
- Pelvic organ prolapse:
  - Cystocele
  - Urethrocele
  - Rectocele

Long, sustained, strong HOLD

- First in gravity-eliminated position
  - GE
  - Hold 6-10 seconds
  - Maintain normal breathing
  - Do 4-5 repetitions
  - Repeat as many times during the day as possible
- Gravity-Resisted position (ANY position)
  - 10 second hold
  - Same as above
Clinicians can provide education to patients, in office, two forms of Kegels for UI management.

2\textsuperscript{ND} TYPE OF KEGEL: QUICK FLICK (FAST TWITCH)

- **Urinary incontinence:**
  - Urge: bladder retraining
    - Timed voiding
  - Stress UI
    - KNACK technique
- **Nocturia**
  - Behavioral & bladder retraining
    - Poor habits developed
2\textsuperscript{ND} TYPE OF KEGEL: QUICK FLICK, CONTINUED

- Gravity-Resisted position (ANY position)
  - 1-2 second hold
  - Normal breathing
  - 10-15 repetitions
- Delay techniques
  - Distraction
  - Wait 5 minutes
  - Avoid rushing to toilet
PHONE APPLICATIONS = BETTER COMPLIANCE

- Android & iPhone Aps:
  - MyKegel (can set # reps, hold time, daily goals)
  - PFEI: Kegel Trainer
  - Squeeze Time
  - Stamena (men, $2.99)
REMINDER: HOW TO JOIN "POLL EVERYWHERE" QUESTIONS

- Open a new text
- Text "To": the number **22333**
  - In the message line, type **LEAHTOBEY999** (not case sensitive)
When prescribing PFPT, what diagnoses are best to use for insurance?

Urinary incontinence: Urge, Stress, or Mixed - whichever applies

Myofascial pain

Muscle Weakness; Muscle Spasm; Muscular Incoordination

Pelvic floor dysfunction
Final Comments and Responses

Pelvic Floor Dysfunction: Anorectal Manometry and EMG

Comment: A letter was received from a provider which described his protocol for providing pelvic floor rehabilitation. It appeared that the provider was using diagnostic (CPT Code 51784) and E/M codes (CPT Code 99211) for services that should be coded as therapeutic (biofeedback, physical therapy, rehabilitation, or exercise program).

Response: Diagnostic codes (51784, 51785, and 91122) are to be used in diagnostics and are not to be reported as therapeutic services. The provider is describing a therapeutic situation and would need to use the biofeedback, physical therapy, rehabilitation, or exercise program codes. Our policy clearly states; Electromyography studies (CPT Codes 51784 & 51785) of the anal or urethral sphincters will be considered medically reasonable and necessary when it is necessary to evaluate a diagnosis of fecal or urinary incontinence, dysfunctional bladder elimination and interstitial cystitis respectively, and to identify possible underlying neurological disease and the results are to be used in the management of the patient’s condition. Anorectal manometry (CPT Code 91122) will be considered medically reasonable and necessary when it is necessary to evaluate a diagnosis of fecal incontinence and dysfunctional anorectal elimination and the results are to be used in the management of the patient’s condition.
A pelvic floor muscle training program in postmenopausal women: A randomized controlled trial


PMID: 25982491 DOI: 10.1016/j.maturitas.2015.03.005
Effect of Urinary Incontinence on Quality of Life and Self Esteem of Postmenopausal Women

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DOI: 10.11648/j.ajns.20180705.15
View 661 Downloads 70

Abstract

Background: Urinary incontinence (UI) is the debilitating condition with impact on physical and psychological aspect of life with consequent effect on the quality of life (QoL). Aim of the study was to determine the effect of urinary incontinence (UI) on quality of life and self esteem of postmenopausal women. A descriptive design was adopted to fulfil the aim of this study. The study was conducted at obstetric & gynaecological outpatient clinic and urological outpatient clinic at Benha University Hospital. A purposive sample of 75 postmenopausal women who had complain of UI attending gynaecological outpatient clinic and urological outpatient clinic. Data were collected through three main tools Structured Interviewing questionnaire sheet, Rosenberg’s Self-Esteem Scale and incontinence-related quality of life (I-QoL). The study Results showed that there were...
The impact of urinary incontinence on health-related quality of life (HRQoL) in a real-world population of women aged 45-60 years: results from a survey in France, Germany, the UK and the USA.

Abrome P, Smith AP, Cotterill N

Abstract

OBJECTIVE: To develop a clear understanding of the relationship between severity of urinary incontinence (UI) and health-related quality of life (HRQoL) and mental well-being in a population of women of working age with the requisite demands of a busy, active life.

SUBJECTS AND METHODS: A survey of women with UI, aged between 45 and 60 years, was conducted via the Internet in the UK, France, Germany and USA between 1 and 30 September 2013. Validated outcome measures were used to assess symptoms and the impact of UI on activities of daily life, HRQoL and mental well-being. The International Consultation on Incontinence Modular Questionnaire Short Form, (ICIQ-UI Short Form); the ICIQ-Lower Urinary Tract Symptoms Quality of Life (ICIQ-LUTS-QoL); the Warwick-Edinburgh Mental Well-being Scale (WEMWBS). The relationships between UI, HRQoL and mental well-being were analysed using analyses of variance and regression.

RESULTS: The survey was completed by 1203 women with UI with an average age of 52.7 years. Based upon responses to the ICIQ-UI Short Form about the amount of urine that leaks, respondents were categorised as having light (n = 1023, 87%), medium (n = 134, 11%) or severe UI (n = 20, 2%). The scores on the ICIQ-UI Short Form increased with severity [mean (sd) scores: light UI 7.9 (3.4), medium UI 13.8 (2.9), and severe UI 20.3 (3.9)], as did the impact on HRQoL, assessed using the ICIQ-LUTS-QoL [mean (sd) scores: light UI 30.6 (7.3), medium UI 41.0 (11.2), and severe UI 56.9 (17.5)]. Mental well-being decreased with severity of UI, the mean (sd) WEMWBS scores were: light UI 48.3 (10.1), medium UI 44.5 (9.5), and severe UI 39.9 (16.2).

CONCLUSION: In women with UI, aged 45-60 years, UI symptoms directly affect HRQoL, which subsequently impacts negatively on mental well-being.

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KEYWORDS: female; mental well-being; quality of life; urinary incontinence

HTTPS://WWW.NCBI.NLM.NIH.GOV/PUBMED/24958472
PELVIC FLOOR DYSFUNCTION RISK FACTORS:

1. Prostate Surgery
2. Age
3. Pregnancy & Childbirth
4. Genetics
5. Hysterectomy
6. Pelvic floor Injury
7. Increased Abdominal Pressure
8. Constipation
9. Intense Physical Effort
10. Obesity
11. History of Back Pain

https://www.physio-pedia.com/Pelvic_Floor_Dysfunction
COMMONLY TREATED PAIN CONDITIONS

- IC/PBS: Interstitial cystitis/Painful bladder syndrome
- Vaginismus
- Dyspareunia
- CPP: Chronic pelvic pain
- Constipation
- PN: Pudendal neuralgia
- EDS: Ehler’s Danlos Syndrome

https://www.glowm.com/section_view/heading/Dyspareunia%20and%20Vaginismus/item/429
PELVIC PAIN MANAGEMENT WITH PT

- Important for PT to teach patient how to relax the pelvic floor musculature:
  - Down-training
  - Imagery
  - Meditation
  - Stress Reduction
  - Diaphragmatic breathing

Pelvic pain sometimes occurs when muscles of the pelvic floor are too tight, says Dr. Elkadry. This causes a condition called myofascial pain, or pain caused by muscle irritation.
THE PELVIS IS A COMPLICATED PLACE

- Most all patients need 2-3 PT sessions
- 8-12 sessions are suggested for optimal outcomes
Development of a standardized, reproducible screening examination for assessment of pelvic floor myofascial pain

Melanie R. Meister, MD, MSCI; Siobhan Sutcliffe, PhD, ScM, MHS; Chiara Ghetti, MD, MSc; Christine M. Chu, MD; Theresa Spitznagle, PT, DPT, WCS; David K. Warren, MD, MPH; Jerry L. Lowder, MD, MSc

BACKGROUND: Pelvic floor myofascial pain is common, but physical examination methods to assess pelvic floor muscles are defined poorly. We hypothesized that a simple, transvaginal pelvic floor examination could be developed that would be highly reproducible among providers and would adequately screen for the presence of pelvic floor myofascial pain.

OBJECTIVE: The purpose of this study was to develop a simple, reproducible pelvic floor examination to screen for pelvic floor myofascial pain.

STUDY DESIGN: A screening examination was developed by Female Pelvic Medicine & Reconstructive Surgery subspecialists and women’s health physical therapists at our institution and tested in a simulated patient. We recruited 36 new patients who underwent examinations by blinded, paired, independent examiners. Agreement was calculated with the use of percent agreement and Spearman’s rank correlation coefficient.

RESULTS: The final examination protocol begins with examination of the following external sites: bilateral sacroiliac joints, medial edge of the anterior superior iliac spine, and cephalad edge of the pubic symphysis (self-reported pain: yes/no). The internal examination follows with palpation of each muscle group in the center of the muscle belly, then along the length of the muscle proceeding counter-clockwise: right obturator internus, right levator ani, left levator ani, left obturator internus (pain on a scale of 0—10). Thirty-five patients were enrolled. Correlation was high at each external (0.80—0.89) and internal point (0.63—0.87; P < .0001).

CONCLUSION: Our newly developed, standardized, reproducible examination incorporates assessment of internal and external points to screen for pelvic floor myofascial pain. The examination is straightforward and reproducible and allows for easy use in clinical practice.

Key words: myofascial pain, pelvic pain, trigger point

Physiotherapy for pelvic pain and female sexual dysfunction: an untapped resource

Bary Berghmans

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Abstract

Introduction and hypothesis Chronic pelvic pain (CPP) in women is a complex syndrome. Pain sensation and intensity often do not correspond with the identified lesion location but are felt elsewhere, leading to musculoskeletal and myofascial disorders and sexual dysfunction (SD). Although physical aspects are prevalent, they are often underdiagnosed and undertreated due to lack of understanding regarding its origin and distribution. Frequently, patients experience pelvic pain as psychological distress resulting in physical complaints, leading clinicians to prescribe medication or surgical intervention to correct or alleviate these symptoms, often with insufficient results. Because pelvic floor muscle disorders contribute significantly to CPP and SD, there is rationale for physiotherapy. However, physiotherapy is a widely underused and untapped resource, which has its place in the multidisciplinary approach to these health problems.

Methods Computer-aided and manual searches and methodological quality assessment were carried out for meta-analyses, systematic reviews, and randomized controlled trials (RCTs) published between 1990 and 2017 investigating classification, assessment, and (physiotherapeutic) treatment of pelvic pain and/or female SD defined by the keywords below. Expert opinions were sought via interviews.

Results Due to a lack of sufficient relevant medical information, referral data, and test results, focused physiotherapy is difficult to administer adequately. However, recent quality studies indicate significant clinical effects of physiotherapy for CPP and female SD, and experts advocate a multidisciplinary approach that includes physiotherapy.

Conclusions Because of its holistic approach, physiotherapy can contribute significantly to the multidisciplinary assessment and treatment of CPP and female SD.

Keywords Chronic pelvic pain - Sexual dysfunction - Vulvodynia - Vestibulodynia - Dyspareunia - Vaginismus - Sensitization - Physiotherapy - Multidisciplinary
PELVIC FLOOR PT RECAP

- Consultation & Brief Ortho Exam
- PF Exam, EMG/Biofeedback Evaluation
- Neuromuscular Retraining
- Pt Education & Home Exercise Program
DR. GOREE: NEUROMODULATION FOR PELVIC PAIN
NEUROMODULATION FOR PELVIC PAIN

- Recent advancements in neuromodulation have lead to the use of spinal cord stimulation for the treatment of severe pelvic pain.
- Multiple Case Reports/Case Series have demonstrated benefit with the use of Dorsal Root Ganglion Stimulation for Pelvic Pain
- Two randomized, multicenter studies are currently on-going to examine efficacy of this treatment
DORSAL ROOT GANGLION STIMULATION FOR PELVIC PAIN TREATMENT

- Current Described Technique: Placement on Bilateral L1 and S2 nerve roots.
- Treats neuropathic or post surgical pain from Ilioinguinal, Iliohypogastric, Genitofemoral, and Pudendal Nerve distributions.
Incontinence is a natural part of aging
Incontinence after childbirth is normal
Nothing can be done to change incontinence
Walking up to urinate every night is normal
It is normal for intercourse to cause significant pain
CONCLUSIONS

• Recap of Kegel Program:
  • 2 types: Endurance (6-10”)
    • Repeat 30-50x/day
  • Quick flick (1-2”)
    • As many times as needed for urgency, KNACK or timed voiding

• Due to the silent nature of the Kegel exercise, it can be difficult to remember!
  • Incorporate into daily routine
  • KNACK: before bending, lifting, sneezing, lifting, turning to look out rear window
THANK YOU

Special thanks to:

• Dr. Lori Mize, board-certified WH specialist & instructor @ UCA

• Dr. Johnathan Goree, M: Head of Chronic Pain @ UAMS

• Kathe Wallace, PT: https://kathewallace.com/
REFERENCES

- Adams, S. Dessie, S., Dodge L., Mckinney, J., Hacker, M., Eldkary, E. Pelvic Floor Physical Therapy as Primary Treatment of Pelvic Floor Disorders with Urinary Urgency and Frequency-Predominant Symptoms. Female Pelvic Medicine & Reconstructive Surgery. Issue Volume 21(S). September/October 2015, p. 252-256. Retrieved from: https://ovidsp.dc2.ovid.com/sp-4.01.0a/ovidweb.cgi?Q52=434f4e1a73d37e8c6a6c15744c324332daee63acab2b1a1982fe9ec375c174a226ec5638c86df82ad1447bccc1ab8e74bc3529cc6fcb617e4da5b9a29daf59030445da3105861095e45b0c4576e694074b9d2055edaf0f105bc87c3f8a8d12c175ed4705044e93d40aae1c34c870ae3b7db4171be4b6111ea7e46c34835347f497aaaee53c4453546b9d3f41cd0d82f114c0c55f1265a18595259a4145cd01be5ed4efc984e69ff866af90125703eb9b49ecec5e8e173a485a8b9e006d283309dd6b15c53347e93e34abaca785a20ff585cf9a65ea83d70dcd8e3f52eb3d6c88fd3fccc48150577e54a77eeebb62644d6995b3fc49ed1647dde360a75393601888


DISCUSSION

Thank you for joining our Webinar
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THANK YOU!

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