Physiotherapy in the Context of Vesicovaginal Fistula

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Disclosures

- Renovia, Inc: strategic consultant
Training centers to report the types of physiotherapy available.

Trainees to know about physiotherapy.

Physiotherapy:
- Pelvic floor muscle training (PFMT) and behavioral training
- PFMT best:
  - Performed 8 contractions, 3x/day
  - Instructed by a specialist
- Post-delivery; Pre/Post-operative
- Main emphasis: Urinary Incontinence

General Principles:

- Post-operative continence.

Objectives:

- Optimum physical fitness pre-operatively through post-operatively and discharge.
- Understanding of pelvic floor muscle and bladder function and relationship to post-op continence.
- Engage a specialized physiotherapist. Another healthcare provider(s) can be taught simple physiotherapy techniques by a qualified physiotherapist.
- Re-establish mobility.
- Bladder and bowel control, and as full and as active a life as possible after surgery.
A pre- and post-operative physiotherapy program in a camp setting in Benin, West Africa published positive results following the initial intervention and again at 1-year follow-up. (Castille et al. 2014, 2015).

Promising results were also reported following a physiotherapy-led intervention of pelvic floor and general exercise, functional training and reproductive health education at a general reference hospital in the eastern Democratic Republic of Congo (Keyser et al. 2014).
Pelvic Floor Physiotherapy for SUI

- PFME best for SUI alone
- Best with \( \geq 3 \) mo supervised care
- No evidence of additional benefit from sEMG biofeedback (Bergmans LCM 1996; Burns 1993; Herderschee R 2011)
Pelvic Floor Physiotherapy: Urgency, Frequency, OAB, UUI

- Pelvic Floor Muscle coordination, ROM, strength
- Behavioral therapies
  - Bladder retraining, urge response/suppression
  - Patient education
- Manual therapies for the pelvic floor complex
- No clear benefit of e-stim or biofeedback to augment PFME

(Burgio 2013; Lukacz et al 2011; Fitzgerald et al, 2012; Adams et al 2015; Burgio et al 2002)
Pelvic Floor Physiotherapy for POP

- Encouraging; not implemented on a widespread scale
- PFM coordination, ROM, strength

(Hagen 2014)
Pelvic Floor Physiotherapy for AI/FI

- PFME has questionable benefit, in general
- Possible benefit of addition of BF (rectal balloon and sEMG), e-stim
- Dietary counseling

(Norton 2012; Rezvan 2015)
Pelvic Floor Physiotherapy for Vaginal Stenosis

- Manual therapy techniques and vaginal dilators effective in treating vaginal stenosis
- Literature highlights gynecologic cancer post-radiotherapy and congenital vaginal agenesis
  
  (Denton 2003; Edmonds 2012)

- Surgical failure and post-operative UI strongly associated with vaginal stenosis

  (Roenneburg 2006; Goh 2008; Nardos 2009)
Pelvic Floor Physiotherapy for Pelvic & Sexual Pain

- Exclusive PFME NOT recommended for these conditions

- Effective treatment includes:
  - Manual therapy techniques to pelvic floor complex
  - Restoration of normal pelvic floor and ‘core’ muscle function (breathing exercises, postural/functional exercises)
  - Dilators may offer benefit for some patients
  - Education

(Rosenbaum 2008; Sapsford 2001; Haugstad 2006)
Reproductive Morbidities and Disability
Reproductive Morbidities and Disability

The International Classification of Functioning, Disability and Health (ICF) defines disability as an umbrella term for impairments, activity limitations and participation restrictions. Disability is the interaction between individuals with a health condition (e.g. cerebral palsy, Down syndrome and depression) and personal and environmental factors (e.g. negative attitudes, inaccessible transportation and public buildings, and limited social supports).

http://www.who.int/mediacentre/factsheets/fs352/en/
Reproductive Morbidities and Disability

Relying solely on maternal mortality to assess a country’s status in the area of maternal health overlooks the importance of maternal morbidity, which is not only a precursor to maternal mortality but also a potential cause of lifetime disability and poor quality of life.

Maternal morbidity: “any health condition attributed to and/or aggravated by pregnancy and childbirth that has a negative impact on the woman’s wellbeing”. This new definition of maternal morbidity will be proposed for inclusion in the 11th revision of the International statistical classification of diseases and related health problems (ICD).

The International Classification of Functioning, Disability and Health (ICF) defines disability as an umbrella term for impairments, activity limitations and participation restrictions. Disability is the interaction between individuals with a health condition (e.g. POP, fistula, incontinence, vaginal stenosis and/or fibrosis) and personal and environmental factors (e.g. negative attitudes, inaccessible transportation, employment, impaired sexual health, and limited social supports).
Reproductive Morbidities & Disability

Reproductive Morbidities:
- Gynecologic Fistula
- Pelvic Organ Prolapse
- Obstetric Injury

Physical Impairments:
- Vaginal Stenosis/Fibrosis
- Pelvic Muscle Weakness
- Pelvic Structural Damage
- Neurologic Damage
- Musculoskeletal Conditions
- Pain

Functional Limitations:
- Sexual Dysfunction
- Urinary Incontinence
- Anal Incontinence
- Mobility Difficulties in Home and Community

Disability:
- Loss of Livelihood
- Limited Employment Opportunities
- Loss of Status
- Divorce
- Social Isolation
- Infecundity
The woman with a fistula doesn’t just have a fistula
- General Mobility Impairments
- Regional pain
- Regional weakness
- Foot drop
- Lower extremity contractures
- Pelvic pain
- Pelvic muscle weakness/incoordination
- Vaginal stenosis, fibrosis
- Overactive Bladder, decreased bladder capacity
- Residual Incontinence
- Pelvic Organ Prolapse
Taken together, physiotherapy addresses her collective needs in:

- Sexual health
- Bladder health
- Bowel health
- ADLs
- Community mobility

• Sexual health
• Bladder health
• Bowel health
• ADLs
• Community mobility
Need for Rehabilitation Research and Strengthening
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Health-related rehabilitation:

“A set of healthcare measures that assist individuals, who experience or are likely to experience disability, to achieve and maintain optimal functioning in interaction with their environments”

Instrumental in improving functioning and promoting participation by people with disabilities

(WHO. World Report on Disability 2011.)
Need for Rehabilitation Research and Strengthening

- Support for health-related rehabilitation services to have the same priority in health systems as conventional medical treatments.

- Under-funded, under-researched, and under-provided, particularly in low and middle income countries.

- Careful about extrapolating research from high-resource settings.

Status

Number of physicians per 10,000

Number of rehab professionals per 10,000

- Estimated 92% of global burden of disease is related to causes requiring some level of physical rehabilitation
- Only 50% of countries are able to provide rehabilitation to approximately 20% of those in need

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