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Systematic Review of the Treatment of Post-Prostatectomy Incontinence

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INTRODUCTION

Urinary incontinence is defined as "the complaint of any involuntary leakage of urine" (Abrams et al., 2002). Globally, the incidence of post-prostatectomy incontinence at 1 year post surgery is between 0 – 5% post-transurethral resection of the prostate (TURP) and between 5% and 35 % post-radical prostatectomy (Diokno, 1998), becoming more prevalent with age, lower urinary tract symptoms, and surgery (Dorey, 2001).

PROBLEM STATEMENT

Urinary incontinence in males who have undergone a prostatectomy is a devastating and under-reported problem. When men are first diagnosed with prostate cancer, the emphasis is usually on the removal of the prostate and the patient's survival, rather than any potential long-term effects of the surgery. On removal of the catheter, most men are surprised and dismayed when they leak urine. For over 80%, their incontinence will abate by 12 months (Moore & Dorey, 1999). This leaves one in five men with an ongoing continence problem and limited treatment options. Men are reluctant to talk about their incontinence and doctors are often not inclined to ask (Powel & Clark, 2005). Further surgery is often not indicated until 12 months post-operation and conservative treatment options are often not discussed (Moorhouse et al., 2001). The ambiguity of the evidence for treatment in this area has led urologists to believe that the natural progression will cure most and that conservative methods offer little to their patients post surgery (Peyromaure et al., 2002).

There are several conservative treatment options currently available for managing urinary incontinence: pelvic floor muscle training with or without biofeedback, electrical stimulation, and behavioral training. All of these have been discussed in the literature.

Pelvic floor muscle training (PFMT) assumes that repeated volitional contractions will hypertrophy the periurethral striated muscle and thereby improve the efficiency of the external urethral sphincter. Furthermore, PFMT is suggested to improve the external urethral sphincter function during increases in intra-abdominal pressures (Dorey, 2001). Biofeedback techniques can assist the training of the pelvic flood muscles. An anal pressure probe or electromyography sensors with a visual display monitor allows the patient immediate feedback on the quality and strength of the contraction. In addition, localization of contractions to eliminate abdominal and gluteal activation can be visualized. The effectiveness of PFMT and biofeedback may be improved by administering these methods pre-operatively (Bales et al., 2000).

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PURPOSE

After a critical review of the relevant medical, nursing, and allied health literature, the following research question was posed: "Is there evidence supporting the use of conservative measures in the treatment of urinary incontinence in men after prostate surgery?" The answer will allow physiotherapists working with male incontinence to make better informed treatment decisions, based on the most effective methods, and highlight areas for further research.

METHOD

This review is based on English literature found through both computerized and manual searches of available databases and journals (See Table 1). It was augmented by reviewing the reference lists of found articles and by communication with known experts in the area of male incontinence treatment.

SAMPLE

- Included in this review were articles on pelvic floor muscle training with and without biofeedback, electrotherapy, TENS, and behavioral therapy in men who have undergone surgery to the prostate for either benign prostatic hyperplasia or prostate cancer.
- Excluded were articles on continence aids for containment (pads, diapers, external condom catheters, and penile clamps), measures a continence advisor cannot apply (collagen injections and other invasive measures), and articles focusing on treatment of the general aging process rather than incontinence specifically.

SEARCH TERMS

The Cochrane Database of Systematic Reviews was searched using the terms male and incontinence. With no other restrictions, 26 complete reviews were found. On inspection of the titles, three were suitable (Hay-Smith et al., 2002; Hunter et al., 2004; Moore et al., 2002). On reading the reviews the following search terms were found: incontinence, continence, urinary incontinence, stress/urge/mixed incontinence, conservative management, prostate surgery, prostatectomy, male, bladder control, physiotherapy (physical therapy), pelvic floor exercises, pelvic floor muscle therapy, therapeutic exercise, Kegel exercises, biofeedback, behavior therapy, behavior modification, behavior(s)(al), electrical stimulation, electrotherapy, faradism, and stimulation. These terms were then used in other database searches. Words were used individually and then combined. The scope notes from relevant articles were also checked for similar subject headings. These were then used to locate additional articles.

ANALYSIS

All retrieved articles were analyzed against the criteria set out in Table 2. The complete summary of the literature found is available in Figure 1.

The scoring tools were developed, discussed, and trialed with a number of colleagues, both physiotherapists and other allied health professionals. Five articles were rated by a colleague to examine the inter-rater reliability of the tool. Minor changes were made to the draft tools to create the final scoring system. The complete assessment tool is found in Figure 2.

RESULTS

After an exhaustive search, 49 articles were collected. Article publication dates ranged from very recent (2006) to quite early (1976). Earlier articles were included as there was nothing to supersede them and the earliest (Sotiropoulos et al., 1976) was frequently cited in later research.

Evidence dimensions. Figure 3 shows that there is only a small amount of literature in the area of conservative treatment of male incontinence. As many as 46% of the reports found were expert opinion and only 34% came from randomized controlled trials (RTCs) and other experimental studies.

In the Level 6 evidence there was also a "Delphi Study" (Dorey, 2000a). This is a method to pool expert opinion to reach a consensus on any topic. The experts were chosen according to their specialty and had published their work. However, as experimental results were not being pooled, this was allocated as Level 6 evidence.

Methodological quality of the literature. The methodological quality of the papers varied considerably. All papers were scored by 11 criteria (see Figure 2). To make analysis easier the papers were then ranked according to their methodological quality. Papers were considered to be of good quality if they scored 9 or higher, to be moderate if they scored 5 to 8, and poor if 4 or less.

As the level of evidence reduced, the quality did as well. There were no poor quality meta-analysis or randomized controlled studies, but many poor quality case studies and articles with expert evidence.

Analysis of the results. The results of each study and the conclusion of each paper were described as supporting or not supporting one or more conservative strategies (See Table 3).

PELVIC FLOOR MUSCLE TRAINING

Only Moore and Dorey (1999) concluded that there is weak evidence to support the use of PFMT. The other three meta-analyses of the available experimental studies were unable to find any significant evidence for the use of PFMT. Without exception, Hay-Smith et al. (2002), Hunter et al. (2004), and Moore et al. (2002) commented on the need for more research rather than eliminating the use of PFMT.

In the available experimental evidence, four out of six studies supported the use of PFMT (Burgio et al., 2006; Chang et al., 1998; Parekh et al., 2003; Sueppel et al., 2001), and two found no significant effects (Joseph & Chang, 2000; Mathewson-Chapman, 1997). The studies that took into account natural healing over time found less effect than those that did not.

Parekh et al. (2003) found that continence was achieved more quickly if PFMT was included during the recovery

Table 1.
Databases Searched

Cochrane Library	Medline (includes pre-Medline)	CINAHL
Psych Info	PubMed	AMED
Joanna Briggs Research Collaboration	Austhealth	MD Consult
Embase	ERIC	PEDro
Australasian Medical Index	ACP Journal Club	

Table 2.
Scoring Tools

Level of Evidence	Scoring Tool	Scoring System	Comments
Level 1	Systematic and review articles	Yes=1 No=0 Total/11	Adapted from AHRQ and Crombie
Levels 2 and 3	Experimental studies	Yes=1 No=0 Total/11	Based on the AHRQ document and with reference to Crombie, Law and Pedro
Level 4	Observational studies	Yes=1 No=0 Total/11	Based on the AHRQ document and with reference to Crombie and Law
Level 5	Case studies	Yes=1 No=0 Total/11	Developed by Saravana Kumar and slightly modified according to standards in the AHRQ document
Levels 6 and 7	Expert and individual evidence	Yes=1 No=0 Total/11	Based on the AHRQ document with reference to the READER method of critical appraisal

Scoring system: Criteria were based on AHRQ and modified according to above references. If a paper met the criterion, one point was scored. A total score of 11 was possible for each paper.

Table 3.
Results

Type of Intervention	Results in Each Level of Evidence (++ stronger support, + weak support, - no support)					
	1	2	3	4	5	6
PFMT	1+ 2-	4++ 2-	2+ 2-	1+	1++ 1+	5++ 7+ 4-
BF	1+ 1-	2+ 3-	3++ 2-	-	-	2++ 9+ 3-
STIMS	1+ 2-	1-	1+	-	-	7+ 6-
TENS	1+	-	-	-	1+	3-
BEH	1+	1-	-	1+	1++	7+ 4-
Unclear	-	-	-	-	1	1

PFTM: pelvic floor muscle training; BF: biofeedback, STIMS: electrical muscle stimulation; TENS: transcutaneous electrical stimulation; BEH: behavioral therapy, and Unclear: the intervention was not described clearly enough to be determined.

period, but one in five remained wet at one year. A study, utilizing pre and post-surgery exercises by Sueppel et al. (2001), found that PFMT taught pre-operatively helped patients achieve continence quicker than if only taught post-surgery. However, the study size was small and did not account for the dropouts. Burgio et al. (2006) had 125 subjects and in a well-designed RCT found subjects who undertook pre-operative training had reduced severity and duration of incontinence. One study, that by Chang et al. (1998), provided strong support for the use of PFMT and reported significant results after four weeks of muscle training but was critically scored low. These authors also reported that urinary frequency improved with pelvic floor exercises. Lack of detail in the methodology leaves in question other types of interventions that may have caused improvement in symptoms. Studies by Joseph and Chang (2000) and Mathewson-Chapman (1997) found no difference between the groups but had a small sample size, and cross contamination between groups was possibly a threat to the validity of the study by Mathewson-Chapman.

Only one high rating case study was found (Dorey, 1997), describing the treatment and outcome measures of a single patient using PFMT.

Of the 16 articles (See Figure 1) that reported use of pelvic floor muscle training, six offered strong evidence for its use. Dorey (2000a) pooled expert opinion in a Delphi study that advocates PFMT as the first option. Dorey, Harris and Moul all reviewed the literature carefully to provided strong evidence for PFMT (Dorey, 2001; Harris, 1997; Moul, 1998, 1994). Rigby (2003) summarized the literature to provide an overall management strategy for the management of post-prostatectomy incontinence that includes PFMT. Several other papers also advocated the use of PFMT. Dorey (2000b) suggested that the area was not well researched, but early results were encouraging; a sentiment echoed by Robinson (2000) and Carlson and Nitti (2001). Parra, Cherullo and Cummings (1997), Hassouna and Heaton (1999), and Joseph and Sueppel (2000) all add weak support with articles scoring lower in regards to the management of incontinence. The four articles that offer no support for the use of PFMT have methodologic problems and score poorly on the critical appraisal score. Peyromaure et al. (2002), Diokno (1998) and Milam and Franke (1995) preferred to offer surgery as the only solution to post-prostatectomy incontinence, while Grise and Thurman (2001) suggested there may be some short-term benefit; the long-term effects are equivocal.

The available evidence in the literature shows some support for use of PFMT. Research work needs to be done to develop the optimal protocol, map the progress of natural healing, and identify factors influencing the mechanism of effect.

BIOFEEDBACK

Three of the level 1 reviews examined the effect of biofeedback. Moore et al. (2002) found that there was no difference in trials where biofeedback was used, while Hunter et al. (2004) concluded that there might be some benefit in the use of biofeedback with PFMT to promote an earlier return to continence. Moore and Dorey (1999) argued that results of four papers were encouraging but limited by nonobjective outcome measures and the lack of control groups.

Two of the RTCs (Floratos et al., 2002; van Kampen et al., 2000) found that there was some evidence to support the use of biofeedback while three found no significant effect (Bales et al., 2000; Franke et al., 2000; Wille et al., 2003). Of the two supporters, Floratos et al. (2002) did not take into account the effect of normal healing as did van Kampen et al. (2000). The protocol of the latter is clinically impractical due to the huge commitment of time required (one session per week for a year). Wille et al. (2003) concluded that including biofeedback to PFMT added nothing except cost to the recovery process. The other two non-supportive studies had flaws in their designs. Franke et al. (2000) commented on the high risk of error due to the small numbers. Bales et al. (2000) did not describe their outcome measures or comment on the normal healing over time in the early postoperative stages.

There is little Level 3 evidence that biofeedback is of use in the rehabilitation of pelvic floor muscles post surgery. Burgio, Stutzman and Engel (1989) concluded that biofeedback was useful in treating episodic stress or urge incontinence but less so if the incontinence was continuous. The highly significant improvement in the outcomes found in a study by Jackson et al. (1996) were compromised by insufficient analysis and lack of blinding.

Knight and Laycock (1994) examined the evidence for using biofeedback in pelvic floor re-education and found strong evidence for its use although they concluded there was a need for further trials. This was supported by a study by Carlson and Nitti (2001). High scoring articles by Dorey (2001, 2000a, 2000b), Rigby (2003), Robinson (2000), Harris (1997), and Moul (1998, 1994) found that there were grounds for the continued use of biofeedback, but noted a need for further research. Diokno (1998) and Joseph and Sueppel (2000) also concurred with the use of biofeedback as an adjunct to PFMT.

Overall, though the high level evidence is scant, there is a trend towards support for using biofeedback as an adjunct to PFMT. Lack of good evidence points to the need for further research on protocol and effectiveness.

ELECTRICAL STIMULATION

Three of the reviews studied the effect of electrical stimulation on the outcome of post-prostatectomy incontinence. Hunter et al. concluded that there were insufficient data to make any conclusions. Similarly, Moore et al. (2002) and Moore and Dorey (1999) found no evidence to support its use.

Only two RTCs were found that evaluated the effect of electrical stimulation on urinary incontinence. Moore, Griffiths and Hughton (1999) looked at the difference between PFMT with and without electrical stimulation. They found no significant difference between the two groups, but thought this was due to the overall improvement from natural healing. Wille et al. (2003) also reported no difference in those who received electrical stimulation with their PFMT over those who only did PFMT.

A frequently cited article by Sotiropoulos et al. (1976) is the only other experimental study on the effect of electrical stimulation on post-prostatectomy incontinence. This article had several problems. There was no blinding, randomization, or statistical analysis shown. Of the subjects, 62% abandoned treatment or remained unchanged. Only three (n=16) were cured, and two were considered controlled, although no definition of "cured" and "controlled" was offered.

Expert opinion is divided on the use of electrical stimulation. Supporters find it useful in treating those with mild-to-moderate incontinence (Moul, 1998) and that it assists the patient in identifying the muscle group (Dorey, 2000a). Two of the urology texts describe its usefulness but do not give reasons (Foote, Yun & Leach, 1991; Hadley, Zimmern & Raz, 1986). In 50% of the analyzed articles, experts concluded that there is no research or evidence to support the use of electrical stimulation. Both Dorey and Moore in separate articles stated that the evidence is equivocal and that more research is needed before conclusions can be made (Dorey 2001, 2000a, 2000b; Moore 2000; Moore et al., 1995). Robinson (2000) and Carlson and Nitti (2001) concurred with this opinion. Rosen (1981) and Bryce (1996) also found no evidence to support its use. Moul (1998) suggested that electrical stimulation may be used for mild incontinence and Hadley et al. (1986) described using "stims" but gave no details or rationale.

From the aforementioned discussion, it is evident that the use of electrical stimulation should be approached cautiously until more evidence is available. This literature review concludes that studies evaluating specific techniques and patients who respond positively are needed.

TRANSCUTANEOUS ELECTRICAL NERVE STIMULATION

Only one review looked at the effect of transcutaneous electrical nerve stimulation (TENS) on the target population. Moore et al. (1995) concluded that there was experimental evidence to support the idea that TENS plays a role in treating detrusor instability. Detrusor instability was not usually attributed to surgery but appeared to play a large role in the treatment of resulting incontinence. A small case study of eight subjects showed improvement in 38% of patients and total continence in a further 38% of stress incontinence post-prostatectomy using TENS (Krauss & Lilien, 1981). Dorey (2000a), Robinson (2000) and Carlson and Nitti (2001) referred to the use of TENS, However, all of these concluded that the usefulness of TENS was not proven and that more research was needed before it could be advocated.

In selected cases, TENS may be of value but which patient will respond best is unclear. Detailed descriptive data on patients who are positive responders would be of value.

BEHAVIORAL THERAPY

Moore and Dorey (1999) examined the role of behavioral therapy. They found that there was very little experimental research (only one paper) to support the use of lifestyle changes on urinary incontinence in men. This paper was positive regarding its use and Moore and Dorey (1999) strengthened this support with expert opinion and current practice.

There was only one observational study which examined the effect of behavioral training. Joseph and Chang (1989) found a 36% cure rate using a combination of behavioral training and PFMT. They were the first to describe behavioral training in this patient group in a detailed protocol that is easily reproduced.

Meaglia, Joseph, Chang and Schmidt (1990) described their experience with behavioral training in a group of 27 subjects. The behavioral training used also included PFMT, and found a significant number of patients improved dramatically. There was no control group and only one outcome measure.

Thirteen of 22 Level 6 articles described the use of behavioral techniques (see Figure 1). Nine of these articles (Carlson & Nitti, 2001; Dorey, 2001, 2000a, 2000b, 1997; Harris, 1997; Moul, 1994; Rigby, 2003; Robinson, 2000) were in favor of using behavioral techniques and offer some evidence. Parra et al. (1997), Foote et al. (1991), Diokno (1998) and Gris and Thurman (2001) offered no evidence or opinion for or against the use of behavioral training, but did mention its use. Reid, Fitzpatrick and Worth (1980) discussed "conservative methods" without explaining what they meant by that term. Behavior training is recommended by the International Continence Society as a first-line treatment of incontinence in males post prostatectomy (Abrams et al., 2002). The use of behavioral training is "based on opinion and consensus but not on strong evidence" (Dorey, 2001, p.73). Most experts concur that lifestyle changes can improve the behavior of the bladder, which has often been affected by the pre-surgery constrictive condition of the urethra caused by an enlarged prostate.

The evidence in this review demonstrates that behavioral training is an area that needs more study. It is widely used by continence advisors, but without evidence-based research. The lack of standardization of what encompasses behavioral training, specific techniques and use, make studying it a challenge. Better definitions and description of techniques employed would assist in this endeavor.

IMPLICATION FOR PRACTICE FROM THE AVAILABLE RESEARCH EVIDENCE

- Using behavioral therapies during the healing phase may assist patients to return to continence more rapidly.
- Most experts advocate careful selection and assessment, rather than a universal treatment for all sufferers.
- Pre-surgery assessment appears to be important in correctly identifying which patient will respond to a specific treatment.
- PFMT augmented by biofeedback may speed recovery from incontinence post-prostate surgery, but hard evidence is still equivocal.
- Electrical stimulation and TENS may assist those who have trouble identifying their pelvic floor, but careful selection of patients is necessary.
- Most of the literature focuses on expert consensus and personal opinion.

Figure 1. Summary of Evidence

Level 1					
Reference	Level of Evidence	Type of Surgery	Type of Intervention	Statistical Analysis	Clinical Implications and Relevance
Peer Reviewed Y/N	Score/11	Number	Outcome Measures	Results	Comments
Hunter et al. 2004	1	Radical prostatectomy, TURP	PFMT vs. Control BF vs. Control ES	Unable to compare trials as populations were different	PFMT + BF may be of use in earlier return to continence
Y	10		Pad use, voiding diary, pad tests, self-reported symptoms, QoL	Value of various conservative management approaches is uncertain	Need more research
Hay-Smith et al. 2002	1	Radical prostatectomy, TURP	PFMT vs. Control	Unable to compare trials as populations were different	Insufficient evidence to support physical therapies to prevent UI in men after prostate surgery
Y	10		Self-reported symptoms, diary, QoL	No significant difference in continence but better muscle function	Males extrapolated from larger study
Moore et al. 2002	1	Radical prostatectomy	PFMT vs. Control BF vs. Control ES	Large CI so is hard to rule out clinically useful effect	There is an argument for delaying formal conservative management
Y	10		Self-reported symptoms, pad tests, QoL	Value of various conservative management approaches is uncertain	Small patient population and not randomized
Moore, 2000	1	Prostatectomy	ES TENS	Unable to compare trials as populations were different	Primary role of TENS and ES is in treatment of urge incontinence
Y	6		Urodynamics, self-reported symptoms, pad test, QoL, diary	ES+BEH for UI may work. Bladder neck ES may work. Weak evidence exists for ES to treat SI. ES+PFMT does not significantly enhance treatment outcomes after RP	Need more research
Moore & Dorey, 1999	1	Prostatectomy	PFMT BF	Unable to compare trials as populations were different	PFMT augmented with BF may help reduce incontinence and effectiveness
Y	5		Urodynamics, self-reported symptoms, pad test, QoL, diary	PFMT +/- BF: appears promising ES: no strong evidence to support use BEH: little research available	Paper concluded with several questions for more research
Level 2					
Reference	Level of Evidence	Type of Surgery	Type of Intervention	Statistical Analysis	Clinical Implications and Relevance
Peer Reviewed Y/N	Score/11	Number	Outcome Measures	Results	Comments
Van Kampen et al. 2000	2	Radical retropubic prostatectomy	PFMT+BF	ANOVA, Fisher's & others	Pelvic floor re-education including BF should be considered first-line option in treatment of post-prostatectomy incontinence
Y	11	102	1/24 & 24/24 pad test, VAS, FVC, QoL	PFMT+BF significantly better than control in reducing duration and degree of UI	Time and financial considerations significant. Commitment of time involved: once a week for a year
Paterson et al. 1997	2		PFMT vs. milking vs. counseling (control)	Spearman's, descriptive, ANOVA	Milking and PFMT better than nothing for improved dribble
Y	11	49	% lost, pad test, bladder chart, modified Oxford grading	Less leakage in those who exercised than those who milked and both much better than counseling	Was included as post-micturition dribble is a significant problem post prostatectomy
Burgio et al. 2006	2	Radical prostatectomy	PFM+BF	Chi^2, t-test, Kaplan-Meier and log-rank test	Reduced duration and severity of incontinence by treating pre-operatively
Y	11	125	Bladder diary, pad use, QoL, questionnaire	Intervention group regained continence quicker	No change in QoL possibly due to other factors influencing psychosocial status
Moore et al. 1999	2	Radical prostatectomy	PFMT +/- ES vs. control	Descriptive, frequencies, t-test, ANOVA	Early treatment with PFMT +/- ES has no effect on improving continence
Y	10	63	24/24 pad test, urine symptom inventory, QoL	All groups got significantly better. No difference b/t groups	Rapid improvement masked any real effect. Need to pick patients who have reached a plateau

Floratos et al. 2002	2	Radical retropubic prostatectomy	PFMT+verbal feedback vs. PFMT+BF	Student's t, Wilcoxon's non-parametric	Both very effective, but no control
Y	9	42	1/24 pad test, number of pads, accident diary	Both groups got significantly better 91% objectively and 95% subjectively at 6 months No significance b/t groups	No account of natural healing that occurs in early months post surgery
Franke et al. 2000	2	Radical retropubic prostatectomy	PFMT+BF vs. control	Student's t, Fisher's exact	Early treatment with PFMT + BF has no effect on improving continence
Y	8	30	Voiding diary, 48/24 pad test	Both groups got significantly better 6 months No significant difference b/t groups	No account of natural healing that occurs in early months post surgery
Wille et al. 2003	2	Radical retropubic prostatectomy	PFMT PFMT+ES BF	Chi^2, Spearman's	No difference if use ES or BF over PFMT
Y	8	139	Questionnaire, pad use, amount of UI	All groups improved up to 83%	No control group describes normal healing process. Verbal and written PFMT instruction only
Porru et al. 2001	2	TURP	PFMT vs. control	Student's t-test, Chi^2, ANOVA	PFMT increases strength of muscles
Y	7	58	Symptom score, QoL, uroflow, PFM strength, diaries	Significant increase in muscle strength only Other outcomes not significant	No significant change in incontinence.
Bales et al. 2000	2	Radical retropubic prostatectomy	Pre-op PFMT+BF vs. control	Chi^2	Pre-operative PFMT + BF has no effect on post-op return to continence
Y	6	100	Number of pads used, rate of return to continence	94% and 96% of BF and controls were continent	Subjective outcome measures only used
Level 3					
Reference	Level of Evidence	Type of Surgery	Type of Intervention	Statistical Analysis	Clinical Implications and Relevance
Peer Reviewed Y/N	Score/11	Number	Outcome Measures	Results	Comments
Parekh et al. 2003	3	Radical prostatectomy	PFMT	Descriptive	Earlier return to continence with PFMT
Y	8	38	Number of pads used, questionnaire	Treatment group achieved continence quicker (12 weeks), no difference at 1 year	No recording of type of pad used
Burgio et al. 1989	3	TURP, Radical prostatectomy	PFMT+BF	Student's t, descriptive	PFMT + BF works for patients with urge and stress incontinence. Less useful in patients with continual leakage
Y	7	20 TURP 13, Perineal/Retro pubic 5, Suprapubic 2	Bladder record, self-evaluation, accident diary	80.7% better UUI 78.3% better SI Limited improvement in patients with continual leakage	Self-control only, starts after initial healing has occurred
Mathewson-Chapman, 1997	3	Radical prostatectomy	PFMT+BF vs. control	Student's t	BF with PFMT enhances performance skill and achievement of some objectives
N	7	53	Accident diary, pads used, time til continence achieved, 24/24 pad test	Treatment group used fewer pads and lost less urine No difference in episodes of incontinence or time til continent	Internal validity threatened as both groups received the same educational program and baseline muscle assessment. Nontreatment group may have been doing PFMT independently.
Sueppel et al. 2001	3	TURP, Radical prostatectomy	PFMT+BF starting pre-op	Descriptive	Starting PFMT + BF prior to surgery improves outcomes
Y	7	16	AUA Symptom Index, QoL, pads used, bladder diary, leakage index	Improvement in pad test, leak stress, urge indices, AUA scores, leaks and QoL	Small sample, unable to evaluate data No intention to treat for the dropouts
Jackson et al. 1996	3	Radical prostatectomy	PFMT+BF	% Only	PFMT + BF should be first-line treatment if patient is motivated
Y	6	28 20 retropubic, 8 perineal	# pads, digital assessment, bladder behavior tracing, subjective reporting	74% improved or cured	Some successes may be due to natural healing as no mention of who were the failures in terms of time since surgery

Joseph & Chang, 2000	3	Radical prostatectomy & TURP	PFMT with verbal feedback vs. PFMT+BF	Not mentioned	Use verbal feedback first and use BF if patient is unable to identify correct technique
Y	6	11 4 retropubic, 6 perineal, 1 TURP	Pad test, leak point pressure, subjective evaluation, VUD	Improvement in both groups, no difference b/t them	Verbal feedback does not cost anything to implement and may be as good as BF
Sotiropoulos et al. 1976	3	Radical prostatectomy	ES	Not shown	To little detail to reproduce
Y	5	16	None identified	Incontinence was better in 45% of group (controlled or cured)	"Controlled" = dry during treatment sessions but incontinent at the intervals This is a frequently cited paper
Chang et al. 1998	3	TURP	PFMT	Student's t, Chi^2	PFMT should be taught post-op TURP
Y	4	50	QoL, fluid intake, PFM strength, frequency	Improved PFM strength, voiding frequency, less incontinence, less terminal dribbling	Unusual results, improved frequency with PFMT. Perhaps BEH was also happening.
Level 4					
Reference	Level of Evidence	Type of Surgery	Type of Intervention	Statistical Analysis	Clinical Implications and Relevance
Peer Reviewed Y/N	Score/11	Number	Outcome Measures	Results	Comments
Joseph & Chang, 1989	4	Prostatectomy	BEH+PFMT	Nil	Detailed protocol described
N	6	25	Not described	9/25 dry, others improved	Observations not defined
Level 5					
Reference	Level of Evidence	Type of Surgery	Type of Intervention	Statistical Analysis	Clinical Implications and Relevance
Peer Reviewed Y/N	Score/11	Number	Outcome Measures	Results	Comments
Dorey, 1997	5	TURP	PFMT	Nil	Limited to 1 subject; critically analyzed
Y	9	1	Leakage (pads), PFM strength/ endurance, psychological assessment	100% better	Clinical reasoning based on current research
Meaglia et al. 1990	5	Radical prostatectomy	PFMT+BEH	Descriptive, Student's t, no confidence intervals	Bladder behavior clinic improves continence status
Y	6	17 Perineal/retro pubic 10, Transurethral 7	Accident diary	56% of the group >75% better Those with previous surgery did worse than those without	No control group, difficult to determine whether BEH, PFMT or being at a clinic produced improvement
Krauss & Lilien, 1981	5	Radical prostatectomy: perineal and retropubic	TENS	Few, descriptive	Unclear protocol
Y	5	8	Urodynamics (??? Valid)	3 "perfect results" 3 "fair to good results"	Authors uncertain whether effect physiologic or placebo
Reid et al. 1980	5	Radical prostatectomy	"Conservative measures"	% only	Due to lack of detail of treatment given, can't apply methods
Y	2	77	Not defined: "cured, improved, failure"	"Conservative measures work"	Unclear operational definitions

Level 6					
Reference	Level of Evidence	Type of Surgery	Type of Intervention	Statistical Analysis	Clinical Implications and Relevance
Peer Reviewed Y/N	Score/11	Number	Outcome Measures	Results	Comments
Dorey, 2001	6	Radical prostatectomy & TURP	PFMT BF ES BEH	Not relevant	PFMT has some evidence for use BF may be useful ES little research BEH limited evidence available, experts agree on its use
N	11		Many are discussed, none used		Authors recognize a need for more research
Dorey, 2000	6	All LUTS including PPI	PFMT BF ES BEH	Not relevant	Indeterminate amount of PFMT used Adding BF may increase awareness ES may help very weak muscles to be identified BEH has some evidence for its use
Y	11		None		Author concludes that the subject is not well researched but results are encouraging
Dorey, 2000	6	Radical prostatectomy & TURP	PFMT BF ES/TENS BEH	Not relevant	Patient specific PFMT is good, BF for weak ES/TENS questionable BEH for urgency
Y	11		Not relevant	Pooled expert opinion	Delphi study
Rigby, 2003	6	Radical prostatectomy	PFMT BF BEH	Not relevant	PFMT research very positive Detrusor over activity needs to be treated BEH is necessary to return to normal function
	11		Several discussed		Recommended more research
Robinson, 2000	6	Radical prostatectomy	PFMT BF ES/TENS BEH	Not relevant	PFMT: experts recommend use but low evidence available BEH: quotes, no evidence offered but recommendations for use ES: preliminary trials equivocal
Y	10		Several discussed		Good review
Knight & Laycock, 1994	6	Unclear	BF	None	BF is an adjunct to PFMT
Y	10			Useful in treating weak PFM	Discusses males and females
Carlson & Nitti, 2001	6	Radical prostatectomy & TURP	PFMT +/- BF ES TENS BEH	None	Authors conclude need more research and larger trials
Y	10		Several discussed	Supports use of PFMT, BF, BEH. Unconvinced on ES and TENS.	Comprehensive review
Moore et al. 1995	6	Radical prostatectomy & TURP	ES TENS	None	ES and TENS may be useful adjuncts
Y	10		Not described	ES may assist in learning PFMT	Need more research
Harris, 1997	6	Radical prostatectomy	PFMT BF BEH	Not relevant	Conservative treatment should be first line of treatment
Y	9		None discussed	Supports PFMT +/- BF BF useful as adjunct	Comprehensive review of the literature
Moul, 1998	6	Radical prostatectomy & TURP	PFMT BF BEH	Not relevant	PPI effectively treated and improved with PFMT
Y	9		Reports several being used	PFMT should be first-line treatment May use BF ES may be used for mild-moderate incontinence	Noninvasive therapies authored by a surgeon
Moul, 1994	6	Radical prostatectomy & TURP	PFMT BF ES	None	Consider conservative before surgery

Level 6 cont.					
Y	9		None discussed	PFMT improves speed of recovery BF has limited role ES is gaining favor BEH useful only in mild UI	Mix of conservative therapy and surgery
Parra et al. 1997	6	Radical prostatectomy & TURP	PFMT BEH	Not relevant	Supportive for conservative treatments short term
N	7		None discussed	"Supportive therapy" and BEH can be effective in selected patients <1 year post surgery	Little detail, emphasis on surgical
Foote et al. 1991	6	Radical prostatectomy & TURP	ES BEH	Descriptive (% only)	Treat according to assessment
	7		Number of pads	ES is useful for detrusor instability	Social continence is defined as 2 pads or fewer per day
Diokno, 1998	6	Radical prostatectomy & TURP	PFMT BF BEH		Surgical
Y	6			PFMT & BF "mainstay treatment" BEH "modest result"	Inadequate literature review
Joseph & Sueppel, 2000	6	Radical perineal prostatectomy	PFMT BF BEH	None	Combination of therapies used
N	5	2	Pads used, FVC, accident diary, QoL, symptom index	Minimal to no UI	Unable to determine which treatment was effective
Grise & Thurman, 2001	6	Radical prostatectomy & TURP	PFMT ES BEH	None	Treatment modalities not well described
N	5			Physiotherapy helps in the short term, equivocal results in the long term	Limited literature review
Milam & Franke, 1995	6	Radical prostatectomy & TURP	PFMT BF		Surgical intervention only
N	4			Useful for mild-moderate sphincter dysfunction	Only reports one other study
Rosen, 1981	6	Radical prostatectomy & TURP	ES	Not relevant	Lacks substantiation
N	4		None	"STIMS can be useful" assess detrusor function first	Single treatment intervention recommended
Hadley et al, 1986	6	Prostatectomy	ES	None	"Use STIMS" but not why some used for a short time, others used chronically
N	3	Radical prostatectomy		40%-60% improved or cured (no further definitions)	Terms not clearly defined so rationale for treatment unclear.
Peyromaure et al. 2002	6	Radical prostatectomy	PFMT BF		"Conflicting results"
N	2			"Early PFMT has been widely emphasized and should be offered" "Physiotherapy does not affect intrinsic sphincter deficiency but should be used as the first-line treatment"	Author describes several surgical options for management of PPI
Bryce, 1996	6	Radical prostatectomy	ES		No evidence offered to support use/non use of ES
N	2			Mentioned but not why	
Hassouna & Heaton, 1999	6		PFMT		Limited evidence used to support views of authors
N	1			PFMT helps early on and where incontinence is mild or moderate	Surgically oriented article

Abbreviations: BEH: behavioral training/therapy; BF: biofeedback; b/t: between; CI: confidence interval; ES: electrical muscle stimulation; FVC: frequency volume chart; IC: incontinence; LUTS: lower urinary tract symptoms; PFM: pelvic floor muscle(s); PFMT: pelvic floor muscle training; PPI: post-prostatectomy incontinence; QoL: quality of life; RP: radical prostatectomy; SI: stress incontinence; STIMS: electrical muscle stimulation; TENS: transcutaneous electrical stimulation; TURP: transurethral resection of the prostate; UI: urinary incontinence; UUI: urge urinary incontinence; VAS: visual analogue scale, and VUD: video urodynamics.

Figure 2.
Critical Appraisal Sheets

Systematic and Review Articles Based on the AHRQ document and with reference to Crombie		
Article:		
Author:		
Criteria	**Where Found**	**Yes/No**
1. Is the study question clear?		
2. Is the search strategy clear and thorough?		
3. Are eligibility criteria defined?		
4. Was a methodological quality assessment made of each trial?		
5. Was the methodological validity of each trial assessed?		
6. Were the methodological assessment criteria used valid?		
7. Were the data collected and analyzed in a common way? (Comparing apples & pears?)		
8. Were the results interpreted in a common sense way regarding the heterogeneity of effect?		
9. Do the conclusions follow the evidence reviewed?		
10. Was funding or sponsorship discussed?		
11. Was reviewer bias addressed?		
Yes = 1 point; No = 0 point	**Total Points**	**/11**
Experimental Studies Based on the AHRQ document and with reference to Crombie, Law and PEDro		
Article:		
Author:		
Criteria	**Where Found**	**Yes/No**
1. Is the study question clear?		
2. Is the study population clearly described for each group?		
3. Was the sample randomized?		
4. Was blinding done to the maximal possible extent?		
5. Were the interventions described in detail?		
6. Is the dropout rate described and justified?		
7. Were the outcome measures valid and reliable?		
8. Were the results reported in terms of statistical significance?		
9. Were the analysis methods appropriate?		
10. Was the conclusion appropriate to the study methods and results?		
11. Was funding or sponsorship discussed?		
Yes = 1 point; No = 0 point	**Total Points**	**/11**

Case Studies Developed by Saravana Kumar and slightly modified according to the standards in the AHRQ document		
Article:		
Author:		
Criteria	**Where Found**	**Yes/No**
1. Was the aim/objective stated?		
2. Is the reason for undertaking the study clear?		
3. Were the inclusion/exclusion criteria described?		
4. Was the type of research design described?		
5. Were the types of measurements used described?		
6. Were outcome measures chosen on their validity and reliability?		
7. Were the results reported accurately?		
8. Were all important outcomes considered?		
9. Did the conclusion reflect the results?		
10. Can the results of the study be generalized?		
11. Was funding or sponsorship discussed?		
Yes = 1 point; No = 0 point	**Total Points**	**/11**
Observational Studies Based on the AHRQ document and with reference to Crombie and Law		
Article:		
Author:		
Criteria	**Where Found**	**Yes/No**
1. Was the aim/objective stated?		
2. Has the study population been clearly described?		
3. Were the subjects matched?		
4. Was the study design appropriate for the aim?		
5. Was the exposure/intervention accurately measured?		
6. Were outcome measures chosen on their validity and reliability?		
7. Were the results reported accurately?		
8. Were the results reported in terms of statistical significance?		
9. Did the conclusion reflect the results?		
10. Were other influences on the results discussed?		
11. Was funding or sponsorship discussed?		
Yes = 1 point; No = 0 point	**Total Points**	**/11**
Expert and Individual Evidence Based on the AHRQ document with reference to the READER method of critical appraisal.		
Article:		
Author:		
Criteria	**Where Found**	**Yes/No**
1. Was the author's intention explained?		
2. Is a wide background explored?		
3. Are opinions backed up by valid arguments?		
4. Is there a wide selection of references?		
5. Does the author refer to own research experience?		
6. Is personal opinion based on significant experience?		
7. Were the results reported accurately?		
8. Were valid outcomes described?		
9. Did the conclusion reflect the results?		
10. Is the information applicable to practice?		
11. Is the author's bias discussed?		
Yes = 1 point; No = 0 point	**Total Points**	**/11**

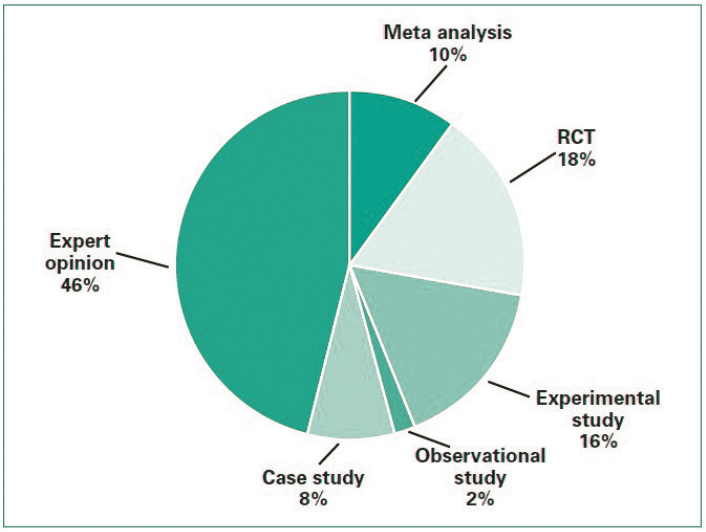

Figure 3: Types of evidence.

FUTURE RESEARCH

In the area of managing post-prostatectomy incontinence, well-designed studies and randomized control trials are needed to clarify the most effective treatments and protocols. Other confounding factors such as surgical technique used, pre-operative co-morbidities, and motivation should be explored as well.

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ICS SURVEY

The International Continence Society (ICS), through its Physiotherapy Committee (Dr Helena Frawley, Assoc Prof Chantale Dumoulin, Dr Doreen McClurg), together with an expert panel, is investigating adherence strategies for pelvic floor muscle exercise training. Adherence to pelvic floor muscle training is a crucial component of an effective intervention.

Comments are sought from members of the public (patients / carers / consumers) who have experience with any of these conditions in a personal or support capacity. We seek responses and comments to the following questions:

(1) what do you think are the barriers to adherence to pelvic floor muscle exercises?

(2) what do you think are the facilitators or strategies to improve exercise adherence?

(3) what ideas for future research into this area do you have?

You may submit your responses via this link:

General Public: http://www.surveymonkey.com/s/PFMPhysiotherapyGeneralPublic

Please strongly encourage your clients to participate in this survey as their perspectives are essential to understanding adherence to pelvic floor muscle training.

EDITOR'S NOTE

Here in Saskatchewan the fall has been lovely, with beautiful warm, sunny days and crisp golden leaves. Like Debbie, this is also my "New Year" and I have been planning the topics for Women's Health Division newsletter over the coming months.

The fall issue will focus on incontinence in men following prostatectomy with two articles by Irmina Nahon. Irmina is a good friend of mine and a rarity in the world of incontinence treatment; she is a pelvic floor physio whose whole practice is with men. She has done some very innovative work, including this issue's second article: "How wet is too wet?" in which she very cleverly uses photos of wet underwear to demonstrate the effect of different amounts of leakage. I think that it is of note that the largest amount of water she used was 5 ml, or 1 teaspoon, demonstrating that it does not take very much leakage to create a wet area that is quite evident. The feature article demonstrates very clearly the holes in our knowledge about treating incontinence following prostate surgery. I hope that it will spawn ideas for research projects in some of you.

Over the subsequent issues topics will include osteoporosis, osteoarthritis, and caregiver stress. Please let me know if you come across a great article or an expert that you think might be of interest to our members. Also please let me know of any topics you would like us to cover.

We are starting a new feature in this issue: The Regional Review. This first one describes the change in physio scope of practice just enacted in Ontario. Please let me know if something of interest (a regional gathering of women's health physios, a change in the law or a profile of a really great practitioner) is happening in your corner of our huge country.

As always, we are continually on the look out for books to review and volunteers to review them. Please remember that you can suggest a book without volunteering to review it and you can volunteer to review without having a book in mind.

Enjoy this issue and the beauty of the changing seasons.

Stéphanie Madill,
Newsletter Editor

NEWS FROM THE WORLD CONGRESS OF PHYSICAL THERAPY

3RD EUROPEAN CONGRESS ON PHYSIOTHERAPY EDUCATION

The WCPT European Region and Physio Austria are pleased to announce that registration for the Physiotherapy Education Congress 2012 opens today. The call for abstracts for platform presentations and poster discussion sessions is now also open. The closing date for submissions is 1st March 2012.

The congress will take place in Vienna, Austria 8th - 9th November 2012. For more information and to view the preliminary programme go to http://congress2012.physioaustria.at/.

WORLD CONGRESS ON LOW BACK PELVIC PAIN

The dates for the 8th Interdisciplinary World Congress on Low Back Pelvic Pain have been announced: 27th - 31st October 2013. Members of WCPT member organisations will be eligible for a discount on registrations fees.

Further details are available at www.worldcongresslbp.com.

FORTHCOMING EVENTS

IFOMPT Conference 2012: the next conference of the WCPT subgroup, the International Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT), will be held in Quebec City, Canada from 30th September until 5th October 2012. Visit www.ifomptconference.org for further details.

WCPT Africa region: the next WCPT Africa region meeting and congress will take place in Nairobi, Kenya in June 2012. All enquiries regarding this meeting should be addressed to Joyce Mothabeng at jmothabeng@wcptafrica.org.

HOW WET IS TOO WET?

By Irmina Nahon (M. Physio) Continence Physiotherapist

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All continence advisors are aware of clients who report severe distress about their leakage, use lots of pads or continence aids, and describe major effects on quality of life; indeed, the emotional impact of incontinence can be quite significant.(1) However, when objective measures are used, there is sometimes a mismatch with what has been reported. Patient perception of how much they leak is greatly influenced by the amount of urine they feel leaving the urethra and the size of the wet patch on their clothing. Thus, there can be a discrepancy between reported incontinence and actual leakage.

During discussions with clients, some of the men expressed an interest in knowing how much they had leaked according to the wet area in their clothing. Many were reassured, knowing that a sizable wet area in underwear was actually only a small amount of urine. As part of a study looking at potential embarrassment and psychosocial impact of incontinence in men, photos of wet areas were made with standardized volumes of water.

The speed at which the urine is forced out (i.e. steady drip during walking versus a fast squirt with sneeze) is also a determinate of how large the wet area is. A fast squirt is more likely to run straight down the legs wetting socks rather than pants. Interestingly, while trying different trousers, it was found that some of the synthetic fibres seemed to repel water, causing it to run into the socks, where as cotton trousers showed the water much sooner.

The ability of urine to wick in clothing has not previously been recorded. Yet patients are interested in finding out how much urine has escaped based on how big the wet area is. Because of hygiene reasons, water was substituted for urine as they have been found to have similar properties (2). Water was used in known volumes to record the amount of leakage that would occur with urine loss. The photos were taken after the water had time to dissipate and wick as far as it would. The resulting photos and volumes are recorded below for the interest of continence clients and as a potential resource for continence advisors.

Figure 1: 1 ml in undies: didn't show on trousers

Figure 2: 2 ml in undies: didn't show on some trousers

Figure 3: 5 ml in undies (not wearing trousers)

Figure 4: 5 ml on flat undies

Figure 5: 3 ml on cotton trousers

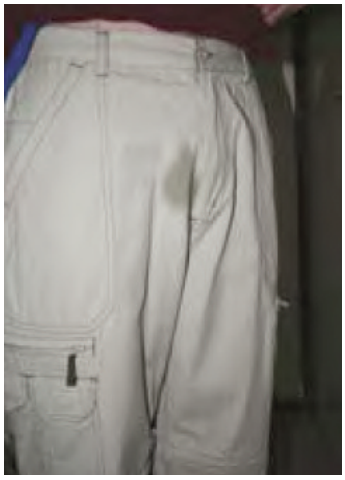

Figure 6: 5 ml on cotton trousers

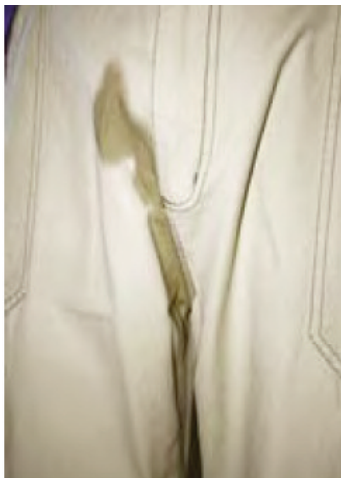

Figure 7: 5 ml on cotton trousers.

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UPCOMING CPA-COCHRANE COURSE HIGHLIGHTS WOMEN'S HEALTH RESEARCH

Over the past year CPA has been working in collaboration with the Canadian Cochrane Centre to develop and deliver webinars to CPA members with the aim of:

1. increasing basic research literacy and
2. encouraging the application of evidence in clinical practice.

The first series of successful workshops took place in the spring; the second and final series of workshops is set to take place in November.

Each session features two speakers, one a representative of Cochrane discussing the core concepts, and the other a physiotherapist clinician who can translate the concepts and relevance to clinical practice, often by pulling research examples and/or patient cases from their particular area of practice. The upcoming November session of this series will feature Chantal Dumoulin and Al Mayhew as the speakers. Current women's health research and practice will be receiving highlight in this session through the examples Chantal will use in her presentation.

Full details on the program and their session can be found on the CPA website at:
http://www.physiotherapy.ca/public.asp?WCE=C=47|K=233665|RefreshT=233658|RefreshS=Container|RefreshD=2336583.

If you attend this session, send us your feedback! Please send comments or feedback to the Women's Health Division Research Rep, Dr. Meena Sran, at movementessentials@shaw.ca

Changes to Ontario Physiotherapy Practice for Pelvic Floor Procedures

Elizabeth Tata
September 29, 2011

Physiotherapists in Ontario working with patients with pelvic floor conditions have, until now, been constrained in their ability to freely assess and treat using internal pelvic techniques by legislation that required delegation of these procedures by other health professionals authorized to perform these procedures (physicians or nurse practitioners). As of September 1st 2011, revisions to the Physiotherapy Scope of Practice in Ontario list pelvic procedures as an authorized act for physiotherapists, without the need for delegation. This is good news for Ontario physiotherapists and their clients who will now have direct access to physiotherapists qualified to offer full pelvic assessment and treatment.

Over the past two years, the College of Physiotherapists of Ontario (CPO), in consultation with the Ontario government and with members, has been working on scope of practice changes that will allow physiotherapists to fully utilize their knowledge, education and skills. Historically, since the last scope of practice revision in 1993, spinal manipulation, tracheal suctioning and acupuncture have been the only three controlled acts authorized to physiotherapists. As of September 1st 2001 the new scope of practice statement: Standard of Professional Practice: Performing Authorized Activities replaces the former Standard of Professional Practice: Controlled Acts. The new scope adds: communicating a diagnosis; treating a wound below the dermis; the administration of substances by inhalation; pelvic procedures; the ordering of diagnostic energy (x-rays, MRI, CT, US) and the ordering of laboratory tests. The introduction of these changes will be progressively staged. From September 1st there are now no barriers to communicating a diagnosis. Changes that will take until 2012; ordering x-rays and other forms of energy for diagnosis and ordering laboratory tests, require changes to regulations external to the physiotherapy profession including the Healing Arts Radiation Protection Act (HARP) and the Laboratory and Specimen Collection Centre Licensing Act (LSCCLA). Procedures involving wound care, assessing or rehabilitating pelvic musculature, administering substances by inhalation, spinal manipulation, tracheal suctioning and acupuncture await the development of a roster of physiotherapists qualified to perform these acts. It is expected that the CPO will have a roster process in effect by November 2011, allowing physiotherapists to add their names to a list declaring their competence (knowledge, skills and judgment) in one or more of the authorized areas of practice.

The wording for pelvic floor rehabilitation states "for the purpose of assessing or rehabilitating pelvic musculature relating to incontinence or pain disorders, putting an instrument, hand or finger 1) beyond the labia majora or 2) beyond the anal verge". The most frequently asked question in response to these changes and the roster process is "Are there specific courses required to demonstrate competence?" The answer to this is "No". As professionals, physiotherapists are responsible for determining their own educational needs and ensuring that they have education and training that provide the necessary theory, practical skills and demonstration of competence. Physiotherapists seeking to develop their skills in pelvic floor rehabilitation may do so through courses offered in Canada and internationally and also by mentorship and informal training with experienced colleagues.

To read the new Standard of Authorized Activities in full please go to the College of Physiotherapists of Ontario http://www.collegept.org/.

CHAIR'S NOTES

Dear Members,

I hope this Fall newsletter finds all of you well, and into your new fall routine. I know September usually means renewal to me. Shaking the sand off from the summer months, regretfully putting on socks again, putting away the white pants and shorts and bringing out the dark colours and getting back down 'to business'……I always see Fall as my 'new year'--- with buying new clothes, a pencil case, and now seeing my kids going to school, instead of me. I hope the transition to fall has been smooth for all of our members over this great country.

I was invited to attend a reception last week honouring a physiotherapist retiring from practice after 39 years. It was a lovely affair, and so many nice speeches to and from the guest of honour but it made me think that renewal isn't only for the new kids going back to school, but also new students to the schools of physiotherapy, the new graduates exiting university and entering the work force, and the new retirees entering the world of retirement. New learning and new connections occurs with all of these transitions and should be embraced as exciting times!

JOHANNA JENKINS GOODBYE

This past AGM at Whistler 2011 we formally said good bye to Johanna, our wonderful WHD secretary. But we know that we will still hear from her as she is keeping herself busy with her work in Prince George, BC as well as the University of Northern BC and working with the physiotherapy students. Thanks to all of your involvement over the past few years with the Division and we hope to stay in touch and let us know what is going on in "the North."

FIND A PHYSIO LIST

This list was updated this past summer, and we have had a few queries from some people who were either not on the list, or their information wasn't renewed. Please take a moment to look at the list, and see if your information is accurate, and email me at: womenshealth@physiotherapy.ca if you have any concerns. I have a running tally of people that I can still use to refer to when people inquire to me about physiotherapists working in Women's Health!

EDUCATION

Call outs for Congress 2012, which is going to be in Saskatoon, Saskatchewan in May 2012 have gone out and we hope to deliver a good program of talks for you at this conference. Recommendations for speakers are always welcome. Also, we are looking into hosting a teleconference in the new year. Let us know what you would like to hear.

On the theme of renewal, I would ask each and everyone of you what you have planned for this "new year." Is there a course you want to attend, or perhaps host, is there a place you always meant to visit, is there a committee or group you want to be involved in? If so, take a deep breath and go forward in this change. Get involved, ask questions, advocate to your patients, and teach your patients how to advocate for themselves. Educate yourself. Take on a student and teach them something about women's health.

All the best and happy Fall!

Debbie Childerhose, Chair

THE BARRAL INSTITUTE

Providing continuing education to Manual Therapists for over 25 years.

Gail Wetzler, PT,
Newport Beach, CA
Presenter of APTA Gynecological VM Course

Manual Therapy Seminars: Needs of the Complex Patient

VM applies soft manual techniques to release restrictions in fascia and ligaments, thereby encouraging the normal mobility, tone and motion of the viscera. By restoring proper movement to the organs, improvement occurs within the functioning of individual organs, the systems the organs function within, and the structural integrity of the entire body.

Visceral Manipulation Can Benefit:

- Pelvic/Vaginal Pain
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- Incontinence
- Fibroids & Cysts
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- Infertility Issues of Mechanical Origin
- Prenatal & Postpartum Musculoskeletal Pain

Visceral Manipulation:

Organ-Specific Fascial Mobilization; Abdomen 1 (VM1)

Vancouver, BC	Dec 1 - 4, 2011
Edmonton, AB	Mar 29 - 1, 2012
Ottawa, ON	Apr 26 - 29, 2012

For additional VM classes in North America visit barralinstitute.com

Visceral Manipulation (VM) was developed by world-renowned French Osteopath and Physical Therapist Jean-Pierre Barral. TIME magazine named Jean-Pierre Barral "one of the Top Healing Innovators to watch in the new millennium."

"As a Physical Therapist and Director of Curriculum of the Barral Institute, I invite you to experience the value of visceral mobilization as it relates to specific results for your patients."

Learn how the visceral system influences musculoskeletal articulations and tension patterns in the body causing functional and structural problems.

We offer 3-4 day lab-intensive seminars throughout the year across the U.S., Canada and internationally. The material is immediately applicable in any clinical setting as it bridges the needs of various patient populations.

Registration and complete schedule:
866-522-7725 or barralinstitute.com

Proud Member of the International Alliance of Healthcare Educators

Upcoming Opportunities!

Sponsored by the Women's Health Division

November 12thth-13th, 2011: Owen Sound, ON
"THE ART AND SCIENCE OF PAIN MANAGEMENT FOR WOMEN"
Contact: Barham Jam 1-866-APTEI-44 Fax: 905-707-0819
E-mail: info@aptei.com

November 18th-20th, 2011: Kingston, ON
"ADVANCED PELVIC FLOOR WORKSHOP (PR2): THE PHYSIOTHERAPY APPROACH FOR DYSPAREUNIA AND PHYSIOTHERAPY FOR MALE URINARY INCONTINENCE"
Contact: Claudia Brown tel: 514-259-3791
email: claudiabrown@videotron.ca or
Marie-Josée Lord mjlord@sympatico.ca fax: 514-697-1141

November 20th, 2011 (Part 1) and February 26th, 2012 (Part 2): Toronto, ON
"THE SACRO-ILIAC JOINT & THE PELVIS COMPLEX"
Contact: Barham Jam 1-866-APTEI-44 Fax: 905-707-0819
E-mail: info@aptei.com

Wednesday, November 23rd, 2011: 12:30 EST
Teleconference Program
PHYSICAL ACTIVITY AND AGEING: BLENDING RESEARCH AND PRACTICE: AN EXAMPLE FROM OSTEOPOROSIS
Contact: CPA Teleconferencing,
Hosted by the Seniors Division

December 10th, 2011: North Vancouver, BC
PILATES FOR PREGNANCY AND POSTPARTUM
Contact: Susie Higgins ph: 604 970 1057 or
email: evolvedpilates@shaw.ca

December 15th, 2011: LIVE Webinar!
BEYOND KEGELS – WHAT EVERY PHYSIOTHERAPIST SHOULD KNOW ABOUT PELVIC HEALTH CONDITIONS
Contact: Alberta Physiotherapy College and Association:
http://www.physiotherapyalberta.ca

January 20th-22nd, 2012: Montreal, Quebec (in French)
"RÉÉDUCATION PELVI-PÉRINÉALE 3 (RP3): L'APPROCHE PHYSIOTHÉRAPEUTIQUE EN ANO-RECTALE ET POUR L'INCONTINENCE URINAIRE CHEZ L'HOMME"
Contact: Claudia Brown tel: 514-259-3791
email: claudiabrown@videotron.ca or
Marie-Josée Lord mjlord@sympatico.ca fax: 514-697-1141

February 16th, 2012: (7 – 9 pm) Hamilton, ON
"SPLIT DOWN THE MIDDLE? TIPS FOR MANAGING DIASTASIS RECTUS ABDOMINIS"
Contact: ProActive Education:
http://proactiveeducation.ca/
or laurie@proactivehealth.ca

February 17th-19th, 2012: Hamilton, ON
"TREATING THE WHOLE PERSON – THE INTEGRATED SYSTEMS MODEL FOR PAIN & DISABILITY"
Contact: ProActive Education:
http://proactiveeducation.ca/
or laurie@proactivehealth.ca

February 24th-27th, 2012: Calgary, Alberta
"ADVANCED PELVIC FLOOR WORKSHOP (PR3): PHYSIOTHERAPY FOR ANO-RECTAL DISORDERS AND CLINICAL REASONING FOR PELVIC FLOOR DISORDERS"
Contact: Claudia Brown tel: 514-259-3791
email: claudiabrown@videotron.ca or
Marie-Josée Lord mjlord@sympatico.ca fax: 514-697-1141

March 23rd-26th, 2012: Ontario
"PELVI-PERINEAL RE-EDUCATION 1 (PR1): THE PHYSICAL THERAPY APPROACH TO FEMALE URINARY INCONTINENCE"
Contact: Claudia Brown tel: 514-259-3791
email: claudiabrown@videotron.ca or
Marie-Josée Lord mjlord@sympatico.ca fax: 514-697-1141

April 19th-20th, 2012: Regina, SK
"LYMPHEDEMA MANAGEMENT SYMPOSIUM"
Contact: http://www.usask.ca/cpte/
(More info to follow)

April 20th-22nd, 2012: Ontario
"ADVANCED PELVIC FLOOR WORKSHOP (PR3): PHYSIOTHERAPY FOR ANO-RECTAL DISORDERS AND CLINICAL REASONING FOR PELVIC FLOOR DISORDERS"
Contact: Claudia Brown tel: 514-259-3791
email: claudiabrown@videotron.ca or
Marie-Josée Lord mjlord@sympatico.ca fax: 514-697-1141

May 5th-7th, 2012: Vancouver, BC
"ADVANCED PELVIC FLOOR WORKSHOP (PR2): THE PHYSIOTHERAPY APPROACH FOR DYSPAREUNIA AND PHYSIOTHERAPY FOR MALE URINARY INCONTINENCE"
Contact: Claudia Brown tel: 514-259-3791
email: claudiabrown@videotron.ca or Marie-Josée Lord mjlord@sympatico.ca fax: 514-697-1141 or
local contact: Pat Leiblich 604-875-2424 local 5196

June 1st-3rd, 2012: Montreal, Quebec (in French)
"RÉÉDUCATION PELVI-PÉRINÉALE 2 (RP2): L'APPROCHE PHYSIOTHÉRAPEUTIQUE POUR LA DYSPAREUNIE"
Contact: Claudia Brown tel: 514-259-3791
email: claudiabrown@videotron.ca or
Marie-Josée Lord mjlord@sympatico.ca fax: 514-697-1141

Ongoing: Montreal, QC

"The Pelvi-Perineal Rehab Program at the University of Montreal"

"Rehabilitation in the Context of HIV"
Contact: cwghrcampus@hivandrehab.ca or
Check the website at:
http://www.hivandrehab.ca/EN/information/care_providers/professional_development.php

"Building Better Bones - Osteoporosis Prevention, Treatment and Management" Meloguide Online Course
Contact: www.melioguide.com/elearning or
Richard Martin at 613-697-8276

For courses International Course listings including the USA, online and home study courses please refer to the following websites:

- Section on Women's Health of the APTA: http://www.womenshealthapta.org/
- Association of Chartered Physiotherapists in Women's Health http://www.acpwh.org.uk/index.php?topic=courses&page=courses
- Curtain School of Physiotherapy (Post Graduate Programs) http://physiotherapy.curtin.edu.au/courses/pg/
- Herman and Wallace Pelvic Rehabilitation Institute: http://pelvicrehab.com/courses/
- The Prometheus Group: www.progrp.com
- Academy of Lymphatic Studies: http://acols.com
- Norton School of Lymphatic Therapy: www.nortonschool.com
- Klose Training and Lymphedema Training and Certification Courses: http://www.klosetraining.com
- Vodder School http://www.vodderschool.com

Women's Health
A Division of the Canadian Physiotherapy Association

NEWSLETTER ADVERTISING RATES 2011

The Women's Health Division has an ever-growing membership of over 400 physiotherapists. Our quarterly publication is national, reaching physiotherapists from coast to coast.

Advertising Rates 2011-2012 (GST included)
Size Per Issue Per year (4 issues)

Size	Single issue price	Full year price (4 issues)
¼ page	$50	$175
½ page	$100	$350
¾ page	$125	$450
Full page	$150	$525

Deadlines for advertising submissions

Winter 2012:	February 1st, 2012
Spring 2012:	May 1st, 2012
Summer 2012:	August 1st, 2012
Fall 2012:	October 1st, 2012

For information please contact: Stéphanie Madill at stephanie.madill@usask.ca

Women's Health Division Executive Members

Chair	Debbie Childerhose	womenshealth@physiotherapy.ca
Past Chair	Evelyne Gentilcore-Saulnier	evelyne.g.saulnier@gmail.com
Treasurer	Cindy Auchincloss	cindyauchincloss@live.com
Secretary	Jodi Boucher	marcjodi@shaw.ca
Newsletter Editor	Stéphanie Madill	stephanie.madill@usask.ca
PR Chair	Becky Weaver	weaver.becky@gmail.com
Education Chair	Allison Francis	allipadfield@hotmail.com
Research Chair	Meena Sran	meenasran@hotmail.com
Eastern rep Nova Scotia	Sarah Short	smshort12@gmail.com
Student Representative	Ashley Joy	as418595@dal.ca

Our services are available in both official languages | Services disponibles en français et en anglais

Creekside PHYSIOTHERAPY & Multi-Service Center

PELVIC HEALTH PHYSIOTHERAPIST

EMPLOYMENT / CONTRACT OPPORTUNITY

Creekside Physiotherapy & Multi-Service Centre is strategically located in the Assiniboine Medical Clinic, a well established Winnipeg based 20+ physician facility.

We are looking for a motivated, energized physiotherapist with a desire to work in an exciting, multi-disciplinary clinic. The successful candidate must have training and experience in women's health specifically in the treatment of pelvic floor conditions and urinary incontinence. Male prostate condition treatment would also be an asset. The current program is delivered in a comfortable and private setting utilizing a state-of-the-art biofeedback unit. Excellent support staff will assist the therapist and address all patient needs. The position is part-time with intentions to grow to full time. An attractive pay scale with incentives and potential benefit plan is offered.

Clinic Services

- **Physiotherapy**
  - Female and Male Pelvic Health
  - Orthopedics
  - Vestibular Rehabilitation
  - Prehab / Rehab Joint Replacement Program
  - Computerized Running Gait Analysis
  - Reconditioning Program
  - Low Intensity Laser Therapy
- **Kinesiology**
- **Massage Therapy**
- **Acupuncture**
- **Custom Foot Orthotics**

Clinic Structure

The clinic is multi-disciplinary in nature. The new decor along with an open concept and state of the art equipment is unsurpassed in clinic settings. The clinic boasts over 2800 sq. ft. with a large gym facility to accommodate the many services and programs offered. A large physician base with a senior patient population will provide the ingredients for a large volume of referrals for pelvic health physiotherapy.

Contact Information

Please contact Scott Allan in confidence for further information or send your resume to: quarryphysio@mts.net or 204-791-2294