



Newsletter February 2012

Opening Letter from Taryn – An Introduction to WHTA

Dear Colleagues,

Being the first newsletter of the year, may I begin by simply thanking you all for becoming subscribers to WHTA.

As many of you are aware, over the last decade I have had the wonderful privilege of holding various clinical and teaching positions within the area of women's health. In my earliest days I taught for the APA, then the University of Sydney (even I find it hard to believe that some of you I taught as undergraduates and you are now 8-10 years graduated) and also the Royal Hospital for Women, Sydney. Then, in the last 5 or 6 years, I intermittently ran courses independently.

Throughout those years however, the common feedback from physiotherapists was a frustration that they had not been aware of courses that were running, and were disappointed they had missed PD opportunities. Physiotherapists would also express frustration regarding how few professional development opportunities appeared to be available in the women's health field (especially in certain geographical areas), and that when opportunities were available the cost seemed above what could be justified by a physiotherapy salary.

As a result, the idea for a service such as WHTA has been a concept in the back of my mind for many years. The hope was to provide a centralised portal for Women's Health related professional development, which was comprehensive, yet not cost prohibitive. Obviously though, I was always conscious of how large an undertaking it would be if I were ever to attempt it. The early 2000s weren't realistic as I had my two children Ethan and Joshua about 16 months apart, and around 2006-2007 my husband Colin was starting up his own business. Thus, it was only last year, after a close friend encouraged me to take the leap, that it started to unfold in a formal sense.

I do hope that you find your subscription this year worthwhile and value any feedback you may have through the year that could improve the service. I would also like to acknowledge my openness and appreciation for any contribution you could make to WHTA....

Contents pp

Letter from Taryn 1

Research Summary 3
Focus: Posterior Tibial
Nerve Stimulation for
Faecal Incontinence

Medicine Review 7
Panadol
Panadeine
and now....Panadol Extra

Product Review 10
Pelvic Floor Educator

Website / Book Review 12
Incontinence: 4th
International Consultation
Abrams, Cardozo, Khoury
& Wein 2009

Final Note from Taryn 14

Copy of last 2/12 Tweets

If you have an interesting clinical case where something you did really worked that you would like to share with the group, please feel free to write something that I can include in future newsletters.

Overall, I hope the service is something you find valuable, and am looking forward to seeing or talking with you all at some point through the year.



This is me in my study at home. My husband Colin came in and took this photo when I was in the middle of writing the Adv PF POP & SUI course. He made me promise that I would include it in the newsletter so everyone could see what he has to put up with at home (LOL).....

He is definitely the more domestic of the two of us – he likes things tidy, and he does more of the ironing and cooking. My study is the room he just closes the door on and pretends isn't there. ☺

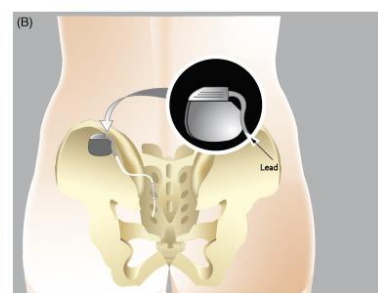
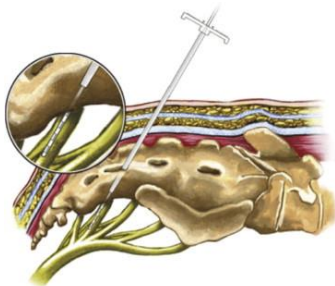
Taryn

February Research Topic –

The Role of Tibial Nerve Electrical Stimulation for Faecal Incontinence

Background 1 – Implanted Sacral Stimulation

As we all know, there is now a wealth of research that has been completed on implanted sacral stimulation for the management of severe urinary and faecal incontinence. The research is fairly consistent..... Permanently implanted chronic sacral nerve stimulation can somehow provide amazing improvements in these conditions when all other treatments have failed. Obviously though, this treatment is a very invasive procedure that would usually be considered a last resort.



Background 2 – Percutaneous Tibial Nerve Stimulation (PTNS)

In the last 5 years or so though, there has been an explosion of research in to the use of Tibial Nerve Stimulation via Percutaneous Electrodes (ie implanted needle) for the treatment of Urge Urinary Incontinence. The aim is to send electrical stimulation signals via the posterior tibial nerve up to the same sacral nerve roots /CNS area that implanted sacral stimulation treatment is focused. Treatment consisting of 30min, once per week has been found to be very effective for urgency and urge incontinence, and more recently, improvements in faecal incontinence have also been shown.



Background 3 – Physiotherapy use of electrical stimulation

Obviously, physiotherapists have used a combination of suprapubic, vaginal or sacral stimulation for the management of various pelvic floor related disorders for a long time. Generally speaking however, we tend to use some form of surface electrode. The nice thing is that the Posterior Tibial nerve comes very close to the surface just behind and above the medial malleolus, making it an easy nerve to stimulate Transcutaneously.

Many of you have heard me talk at the OAB course about the exciting early research showing that Tibial Nerve Stimulation might be effective if performed Transcutaneously (TTNS – Transcutaneous Tibial Nerve Stimulation) rather than percutaneously (PTNS) for urge urinary incontinence. ***But what about for Faecal Incontinence???***

Research on Transcutaneous Tibial Nerve Stimulation for Faecal Incontinence

2006

Preliminary Results of Peripheral Transcutaneous Neuromodulation in the Treatment of Idiopathic Fecal Incontinence

Queralto M, Portier G, Cabarrot P, Bonnaud G, Chotard J, Nadrigny M and Lazoreth F
International Journal of Colorectal Disease, Vol 21, No 7, pp670-672

Introduction

This was one of the first studies looking at the possibility of using Transcutaneous stimulation of the Tibial nerve to treat faecal incontinence. It therefore was purely a treatment based study of 10 women with no control group.

Subjects

All women in this particular study were assessed as having “idiopathic” faecal incontinence. The authors explain that their definition of idiopathic FI was the symptom of faecal incontinence despite no observable sphincter defect and no anatomical rectal prolapse. In addition, it was identified that all women included in the study had previously failed both standard medical treatment options and PFMT with biofeedback. In addition, one woman in the group had previously attempted sacral stimulation with no improvement in symptoms.

Treatment:

All women received Posterior Tibial Nerve electrical stimulation via self-adhesive electrodes (no needle electrode was used).

Parameters: 200us, 10Hz
 20min Daily for 4 weeks

The negative electrode pad was placed immediately behind the medial malleolus on one leg only, with the positive electrode pad placed 10cm superior to the negative. Confirmation of correct placement of electrodes occurred by increasing stimulation and finding rhythmic flexion of toes in time with stimulation. Once correct placement was

confirmed, the intensity level for the 20min treatment duration was determined by the highest mA that could occur without creating a motor contraction effect. The intensity chosen therefore ranged from 10-35mA across the 10 women.

Results:

Whilst 2/10 women showed minimal change, 8/10 women showed an average 60% improvement in their faecal incontinence score after the 4/52 of treatment. In addition, this improvement persisted for the 12/52 follow up after treatment.

The authors concluded that Posterior Tibial Nerve Stimulation via self-adhesive TENS electrodes appears to be a safe, effective alternative to permanent sacral neuromodulation for idiopathic anal incontinence.

2009

Transcutaneous Posterior Tibial Nerve Stimulation for Faecal Incontinence in Inflammatory Bowel Disease patients: A therapeutic option?

Vitton V, Damon H, Roman S, Nancey S, Flourie B and Mion F
Inflammatory Bowel Disease, Vol 15, Issue 3, pp. 402-405.

Introduction

This study once again is not a RCT. The procedure was performed exactly the same as the Queralto et al study above in that Treatment consisted of 20min daily of TTNS at 10Hz, 200us and 10-30mA. Electrodes were placed just behind the medial malleolus and 10cm superior. However, treatment for this group continued for 3months rather than 4/52.

Subjects

The main difference with the Queralto study was that this was a group of 12 people (9 females and 3 males) with a specific diagnosis of faecal incontinence associated with Inflammatory Bowel Disease. Of note is that the authors opening statement in the abstract makes reference to the fact that "Faecal incontinence associated with inflammatory bowel disease (IBD) may be particularly difficult to treat".

Results:

At 3months, 5/12 patients (41.6%) reported a significant symptomatic and quality of life improvement.

In all 5 cases that showed improvement, the degree of improvement was greater than 50% (60% improvement in 1 patient, 70% in 2 patients, 80% in 2 patients).

3 patients also showed an improvement in the time they were able to defer defecation, and one patient described disappearance of nocturnal soiling.

2010

Transcutaneous Electrical Posterior Tibial Nerve Stimulation for Faecal Incontinence

Vitton V, Damon H, Roman S, Francois M
International Journal of Colorectal Disease, Vol 25, No 8, pp1017 - 1020

Introduction

This study once again is not a RCT. It is by the same lead authors as the study above and with exactly the same methodology of 20min daily TTNS for 3/12.

Results:

13/24 patients (54%) showed a significant improvement in faecal incontinence scores. 11 of 13 patients continued to show this improvement at 15months.

Taryn's comments??

Unfortunately, none of these studies are randomized controlled trials and therefore it is hard to dispute the fact that a large effect could be placebo. With that said, there is always the long running debate of whether a placebo effect is fine as long as the patients feel they are getting better??

The mechanism behind this improvement is uncertain (in the same way that it is uncertain why implanted sacral stimulation works). However, some authors suggest that the electrical impulses travelling via the tibial nerve to the sacral spine may be facilitating a somatic -autonomic reflex that then facilitates activation of the internal anal sphincter.

Either way, as we all know, faecal incontinence is a particularly difficult area and one which many patients are too embarrassed to seek treatment about. This is an exciting area of research that may provide a very non-invasive, non-confronting option for the many patients who suffer from this particularly distressing condition. Hey... even our musculoskeletal colleagues who can't bear the thought of ever going near a vagina or anus can perform this one! ☺

An Interesting Link with One of my Previous Pelvic Floor Pain Patients:

Just as an interesting note..... Recently I had a patient of mine return for treatment after being relatively asymptomatic for a number of months. This lady was in her mid 20's and had originally come to me with hypertonic pelvic floor muscles creating generalized pelvic pain, rectal pain and dyspareunia. We had originally treated her with manual therapy of both levators and superficial pelvic floor including soft tissue release and trigger point work. At the time this improved things substantially. About 3/12 after discharge however she returned with an exacerbation of symptoms.

Initially on questioning she stated she couldn't think of anything that had happened that could have exacerbated her symptoms. Interestingly, on her next appointment she was telling me about her electrical foot stimulation device she recently bought for "circulation". She explained that when she used it she could feel her Pelvic Floor Muscles contract.

On talking to her further about this device I realized that this was a product that is marketed simply in department stores. It is a round plate that you place on the floor that provides a TENS like current to the bottom of your feet and claims to improve Lower Limb circulation. Every time she used it, I assume that it was activating her tibial nerve on the underside of her feet and causing a Pelvic Floor contraction via it's sacral nerve root stimulatory effect.

Nonetheless, I told her to cease the machine and sure enough.... Her PF hypertonicity exacerbation resolved!!

February Medications Update –

As each new patient walks through our door we embark upon a subjective history that will hopefully identify all the different factors that could be contributing to their condition. As physiotherapists, the impact of the thousands of possible medications is a daunting world that is hard to keep up with. In each newsletter I will simply choose a medication to review that I think is relevant to women's health physiotherapists (I need some advantage of the nursing degree that I 95% completed!). If there is a specific medication you would like reviewed in the next newsletter, please feel free to email me.

This Month: **Panadol, Panadeine, Panadeine Extra.....**

Now: **Panadol Extra???**



Interestingly, all the products shown above are S3 or lower medications. This means that they can be purchased over the counter in a pharmacy without a prescription. The question I often wonder though is whether people really know what they're purchasing.

I am sure you are all very aware of the names "Panadol" and "Panadeine". You may have even seen *Panadeine Extra*. But have you seen the new ads around the country for "**Panadol Extra**"??? It was first approved by the TGA in October of 2009, became an S2 pharmacy medicine in May 2010, and became a major player on the market last year with the company's large advertising campaign. It ultimately won the Adult Medicine Product of the Year 2011.

So what is it??? Well, whilst *Panadeine* and *Panadeine Extra* are reasonably similar, *Panadol Extra* is very different. I will go through each of them, starting with the original Panadol.

Panadol is obviously the GlaxoSmithKline brand name version of Paracetamol 500mg. This 500mg of Paracetamol is the common factor in all the above products and is both an **analgesic** and **anti-pyretic** (reduce temperature). Note.... Unlike Ibuprofen (found in Nurofen), it is not an anti-inflammatory. The adult dose is usually 1000mg, which means 2 tablets are required, usually taken 4hourly.

The active ingredient Paracetamol is absorbed by the gastrointestinal tract with peak plasma levels usually occurring 30-60minutes after administration. It has a half-life of ~1-4hours, with another 35-40% (total 85-90%) then eliminated from the system within 24hours. Because a reasonable amount of paracetamol remains in the system for 24hours there is a maximum daily dosage of 4000mg (4 x 2tablet doses) within any 24hour period.

Panadeine tablets basically contain the same 500mg of Paracetamol that is in Panadol, but with an additional **8mg of codeine phosphate**. Codeine is from the opiate/narcotic family, with strength of about 1/6th of morphine. In fact, a small amount of codeine actually converts into morphine when metabolised within the body. The codeine acts centrally, blocking not only the sensation but also the emotional response to pain within the CNS. It does have a mild sedative effect, with some people experiencing dizziness and drowsiness, and prolonged high doses of codeine can result in dependence.

Panadeine extra is then basically a stronger version of Panadeine. It still has the same 500mg of paracetamol but now has **15mg of codeine** added to each tablet. It is an S3 medicine which means that although it can be purchased without a prescription it requires a pharmacist's involvement in the sale (it will only be found behind the counter and the pharmacy assistant needs to get clearance from the pharmacist before selling it to you).

Women's Health Note regarding *Panadeine* and *Panadeine Extra*:

Both these products therefore have Codeine. Opiates such as codeine and morphine have long been known for not only their pain relieving effects but also their smooth muscle relaxant effects. Historically they were often used to treat diarrhoea as they slow the peristaltic movement of faeces through the intestine, increasing the water re-absorption time and thereby resulting in firmer stools. However, this also means that in a person with normal bowel motions, the taking of a pain reliever such as Panadeine or Panadeine Extra can result in constipation. Obviously this then has all the associated repercussions of constipation and straining which obviously increases the risk of prolapse. In addition, the constipation may then cause incomplete bladder emptying or increased bladder sensation during filling.

As opiates cause smooth muscle relaxation it is not surprising that both systemic and intra-theal (spinal) morphine have been shown to dramatically inhibit detrusor contractility. This is also the case for a number of other narcotics / opiates. However, there appears to be nothing in the literature that indicates the 16-30mg of Codeine that is consumed when taking two tablets of Panadeine or Panadeine Extra is sufficient to cause a side effect of difficulty voiding. Logically however, it can probably be assumed that it at least isn't going to worsen detrusor overactivity if the usual impact of opiates is to reduce smooth muscle activity.

So what about Panadol Extra???

Like all the other Panadol and Panadeine varieties, Panadol Extra is an analgesic and antipyretic, it is not an anti-inflammatory. Basically, Panadol extra is once again 500mg of Paracetamol per caplet but this time they have added 65mg of **Caffeine**.

The Caffeine in Panadol Extra is absorbed easily in the body after oral administration. It has been shown to reach peak plasma concentrations within 1 hour, with a half-life of 3-7 hours. The standard dose of two caplets results in a total consumption of 1000mg Paracetamol and 130mg of caffeine, which has been suggested is equivalent to ~2 cups of instant coffee.

Note:

Every 1 Panadol Extra caplet provides the equivalent caffeine of 1 cup of coffee.

The usual dose of two tablets is therefore equivalent to 2 cups of coffee.

If someone has 8 Caplets of Panadol Extra in a day (4 x 2 Caplet doses) they will have the equivalent of 8 cups of coffee, not including any caffeinated food or beverages they have consumed through the day.

Caffeine has long been known to be a pain reliever in its own right. The question is whether it provides additional benefit to paracetamol alone. Clinical trials have shown that 7 out of every 10 people who took paracetamol plus caffeine felt that their pain had been significantly relieved. However, so did 6 out of 10 people who took paracetamol alone.

Most of the studies have been of the single dose effects on tension and non-migraine type headaches, dysmenorrhea, postoperative pain and uterine cramping.

Some of the concerns with Panadol Extra is that it has been shown that even small doses of 50mg of caffeine can cause Tachycardia and anxiety in some people. Toxicity is normally seen at >500mg caffeine, and pregnant women are advised to not consume more than 200mg of caffeine per day.

Unlike Panadeine Extra, Panadol Extra is an S2 medication. This means that whilst it is sold in a pharmacy it does not require input from a pharmacist and can be found on a standard shelf not behind the counter. A person can pick it up and take it to the cashier at the register without anyone questioning or advising of what is in it.

Women's Health Note regarding *Panadol Extra*:

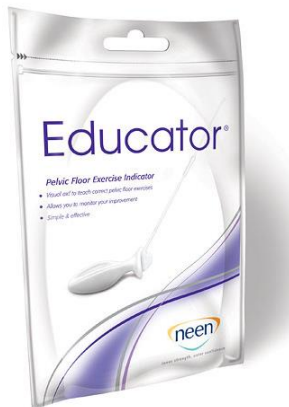
At present there are no studies looking at the effect of Panadol Extra on bladder function, urgency or detrusor overactivity. Obviously, we all usually encourage our patients to trial limiting caffeine if these symptoms are present. Interestingly.... We now have Panadol with no additive, Panadeine that adds codeine - a smooth muscle relaxant, and Panadol Extra that adds caffeine which can be a bladder irritant.

At least they have sort of colour coded the packets. Green packets are straight paracetamol, Blue has codeine added, orange/red has caffeine added (I find this helpful when patients aren't sure what they are taking).

It would be interesting to hear your thoughts on these products generally, but particularly if you have noticed a change in your patients' bladder or bowel symptoms with their use. We could include any short letters from you all on this in the next newsletter???

February Product Review –

The “Pelvic Floor Educator”



Brief Summary:

The Pelvic Floor Educator is a device aimed to provide external feedback of a correct pelvic floor contraction. If the patient utilizes the levator ani to provide an antero-superior movement of the vaginal probe then the needle tip will move downwards. The greater the upwards/forward lift the greater the movement.

Example Prices:

Please note – these are the general public prices from the website correct as at the 18th February 2012. Many of these websites provide reduced prices for health professionals. You should contact the companies directly for an accurate price list.

Pelvic Floor Exercise	www.pelvicfloorexercise.com.au	\$41.95 AUD
Pelvic Exercises	www.pelvicexercises.com.au	\$41.94 AUD

Taryn's Review:

Admittedly, this is a product that for a number of years I didn't really bother using in my clinical practice. With that said, those of you who have recently attended the Advanced PF – Stress Incontinence course will have heard me talk at length about theories on the importance of good bladder neck /upper urethral position when assisting patients to achieve continence during periods of increased intra-abdominal pressure.

The now accepted impact of bladder neck position on the continence mechanism is what has led to theories that the role of the pelvic floor in improving stress incontinence may be more to do with its ability to maintain the urethra /bladder neck up high relative to the pubis than its ability to create a sphincteric type closure around the urethra. If this is the case, then PFMT aimed at improving the directional pull of the levator on the urethra is probably more important than improving the squeeze / closure at the vaginal introitus that commonly occurs by activating the superficial PF.

Note:

Translabial ultrasound produces an upside down picture. The urethra and bladder however can clearly be seen. The lady on the right demonstrates bladder neck hypermobility with rotation of the urethra and bladder neck postero-inferiorly on valsalva. The idea of a PFC is to lift/maintain the bladder neck antero-superior.



AT REST

VALSALVA

So why use this type of Biofeedback??

Recent reviews have shown that women have greater improvement in Stress Incontinence when they have some form of feedback. What hasn't been determined though is which type of feedback is best. It would seem reasonable to assume however that feedback that is reflective of what we are trying to achieve is likely to be the most beneficial.

Recent research by Crotty et al (Neurourology & Urodynamics 2011) has shown that achieving a change in urethral angle can be quite different depending on the verbal cue given to the patient when teaching PF mm contractions (a posterior focused cue seems to create a more optimal change in urethrovesical angle than an anterior cue which seems to focus more on vaginal closure). Thus, we now know that not all types of pelvic floor contractions necessarily create equally beneficial urethral positioning for continence.

Many of the pressure biofeedback devices on the market (peritron, PFX etc) are much more reflective of a change in introital closure than the directional movement of the urethra caused by the levators. EMG feedback is purely a measure of electrical activity within the muscle – it could therefore be suggested that if the pubovisceral portion of levator ani is actually avulsed, you could be measuring a very large electrical activity in the muscle even though it may not be translating to a functional change in position of the urethra. Ultrasound (as shown below) can obviously show a movement of the urethra both on PFC and on valsalva, but not everyone has access to this type of equipment and the patient certainly doesn't at home.

Overall:

I suppose with all this said, I can't help but feel that the justification for having a product such as this on the market is definitely increasing. In terms of co-ordination, it seems a very easy way to give feedback to a patient that they are likely to be achieving a functional change in position of the urethra, not just a contraction of the introitus by the superficial components of the pelvic floor musculature.

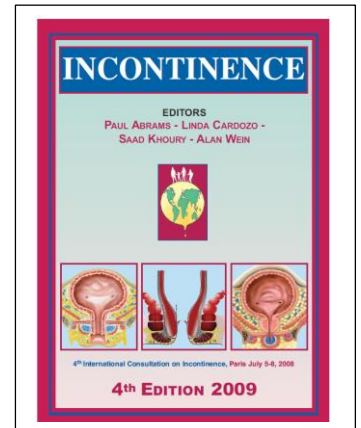
February Website / Book Review:

Every newsletter I hope to review a website or book relevant to women's health physiotherapists. As this is the first newsletter, I thought that I would review something that is both. It is a website that gives you a book..... but not just any book, probably the book I regard as the most significant text produced in the field of incontinence.

Incontinence- 4th Edition 2009

4th International Consultation on Incontinence, Paris July 5-8 2008

For those of you who have never seen any of the editions of this book (this is the 4th version), I will begin by saying once again that my personal belief is that this book is probably the most significant text produced in the *incontinence* field.



This book is BIG (**it is 1,870 pages!!**), and is completely revised and updated every few years. But before you panic, it is not designed to be read cover to cover. Rather, it is designed to be a continually revised encyclopedia of anatomy, physiology, assessment techniques and treatments for incontinence, and it is FREE!!! That's right, the whole encyclopedia is downloadable as an electronic book, free to your computer. When you click on a topic within the index it takes you straight to the chapter you want to read and then you scroll through the pages.

To download this book to your computer you should be able to click here:

<http://www.icud.info/PDFs/Incontinence.pdf>

To understand why I regard this book so highly I probably need to first begin with a discussion regarding the Organisation that produces it: the "International Consultation on Urological Diseases" (ICUD).

What is the ICUD and what do they do?

Note of acknowledgement: this organization is very good at describing themselves and their purpose, so the information below is a direct quote from their website www.icud.info.

"The International Consultation on Urological Diseases (ICUD) was established as a scientific, international, non-profit association under Belgium law on June 28, 1994. The main reason for its foundation was the need to create a non-government organisation working in association with the WHO and UICC (Union Internationale Contre le Cancer)."

The principal aim of the ICUD is to promote the improvement in the management of urological diseases worldwide by producing evidence based recommendations. The ICUD seeks to achieve this aim by bringing together experts representing the major urological organisations world-wide into consultations that produce recommendations that are based on a transparent process which examines and analyses the available literature according to the principles of evidence-based medicine. The recommendations from each consultation must be suitable for use in all parts of the world, recognising that the health services' resources differ widely between countries"

What does this mean???

Basically, the ICUD regularly holds what they call "Consultations". This is where they bring ~200 leading experts from a variety of disciplines (anatomists, doctors, physiotherapists, nurses, neurophysiologists, statisticians etc) together every few years. They split them all up into "Committees" based on their area of expertise, and then get each committee to review all the recent research within their area. Each committee is tasked with producing a completely revised chapter summarizing the most up to date research in their field, which is then compiled into a book. This book then becomes freely available on the web, providing an up-to-date summary of all issues related to that particular urological condition – in this case – "Incontinence".

Overall, this book provides a place where you can look up any topic related to incontinence and find a summary chapter of 20-150 pages outlining the most recent research and accepted opinion, as agreed by an International, *multidisciplinary* faculty of more than 200 recognized experts from around the world. The consultation is repeated every 3-4 years so that a new version of the book is produced that is relatively up to date. As mentioned.... Once downloaded... you can simply click on a chapter and the e-book will take you straight there.

Some of the members of the International

Committees Paris, France - July 5-8, 2008





Final Note from Taryn

This is now the end of the first newsletter I have produced for WHTA (not including the copy of tweets I have included on the following pages for those of you without a twitter account). I must admit it is a little nerve-wracking starting a new process and hoping that it is received well. With that said, improvements will only occur if I receive feedback. I do value any suggestions you may have on how the newsletter can be improved in the future.

As mentioned earlier, I think it would also be nice to have a letters section in the newsletter. A section where you can contribute something if you wish. If you regularly use a certain website, or have an interesting case that you would like to write something about, or a product you have recently started using and have found helpful, I am more than happy to include a "Letters" section in future newsletters. Letters could also be a comment on any of the topics in this newsletter. They would only need to be brief.

Regards,

Taryn.

Copy of Tweets at WHTA_Physio

As this is the first newsletter, I have included all the tweets at WHTA to date. In future I will only list the tweets since the last newsletter.

PELVIC GIRDLE PAIN / MUSCULOSKELETAL WOMENS HEALTH

Stuge et al 2012 Pelvic girdle pain may be more related to high tone PF than PF weakness.
<http://www.sciencedirect.com/science/article/pii/S1356689X11002384>

Fitzgerald 2012: 96% of pregnant women with pelvic girdle pain have pain on palp of lev ani compared to 20% without PGP <http://www.springerlink.com/content/j3q4872320771347/>

CHRONIC PELVIC PAIN (Gynaecological, Urinary and Colorectal Pain)

Proctor et al 2010 Cochrane Review - High frequ TENS ~100Hz may help reduce primary dysmenorrhea (but not low frequ) <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD002123/abstract>

Reissing et al 2012 Physios found to provide more help for vaginismus than Gynaes, GP, Nurse, Psych or Sex Therapists. <http://onlinelibrary.wiley.com/doi/10.1111/j.1743-6109.2011.02534.x/abstract>

ANAL SPHINCTER INJURIES

Marsh et al 2011 EJOG: Impact of OASIS on bladder, bowel and sexual function. Results of 435 women in the UK. [http://www.ejog.org/article/S0301-2115\(10\)00466-5/abstract](http://www.ejog.org/article/S0301-2115(10)00466-5/abstract)

Roos et al 2011 Int Urogyn J: Anal rest/squeeze pressures <53mmHg on manometry identifies persistent sphincter defects. <http://www.springerlink.com/content/r3165l83t2g31377/>

OVERACTIVE BLADDER

Burgio et al 2011 BR(Delay Void) vs Antimusc: BR better for Nocturia, equal for frequency, not as effective for urgency. <http://dx.doi.org/10.1111/j.1532-5415.2011.03724.x>

Leong et al 2011 Time needed to see symptoms impr w PTNS Rx is 5/52 for Nocturia, 6/52 for Urgency & 7/52 for Frequ.
[http://journals.lww.com/jpelvicsurgery/Abstract/2011/03000/Posterior Tibial Nerve Stimulation in Patients Who.5.aspx](http://journals.lww.com/jpelvicsurgery/Abstract/2011/03000/Posterior_Tibial_Nerve_Stimulation_in_Patients_Who.5.aspx)

Panayi et al 2011: rectal distension alters bladder vol causing strong urge by 33% and max bladder capac. by 26% <http://onlinelibrary.wiley.com/doi/10.1002/nau.20944/abstract>

Greer et al 2012: all Physio Rx except vaginal cones (PFMT, vaginal elect stim & magnetic stim) found to provide statistically significant improvement in Urge incontinence
<http://www.springerlink.com/content/u6r143qq21kv7v33/>

SYMPTOMS RELATED TO SEXUAL FUNCTION / SEXUALITY

Jha et al 2012: ~60% of women with UI have coital incontinence that significantly affects QOL. FULL TEXT LINK <http://www.springerlink.com/content/ml7t752675276hq6/>

Kuhn et al 2011 PF dysfunction incl SUI, urgency, UUI, & prolapse occurs in transexuals after sex reassignment surgery [http://www.fertstert.org/article/S0015-0282\(11\)00438-9/abstract](http://www.fertstert.org/article/S0015-0282(11)00438-9/abstract)

El-Azab et al 2011: Coital incont (even when assoc w orgasm) more assoc with urethral incompet /SUI mechanism than DO. <http://onlinelibrary.wiley.com/doi/10.1002/nau.21041/full>

Vollebregt et al 2012: 43% women have worsening of sexual function after ant repair with mesh for cystocele compared to only 18% when mesh isn't used. <http://tinyurl.com/74johha> (also listed under POP surgery)

STRESS INCONTINENCE

Bo et al (2011) Neurour & Urodyn: 25.9% of yoga & pilates instructors report SUI but only 1.7% daily, 3.2% 2-3/week. See <http://onlinelibrary.wiley.com/doi/10.1002/nau.21006/full>

Crotty et al Neurourol Urodyn 2011: Posterior focused PFC creates more optimal urethrovesical position for continence <http://onlinelibrary.wiley.com/doi/10.1002/nau.21083/abstract>

Herbison 2009 online Cochrane finds vaginal cones may be equally effective as PFMT for SUI h/e some women dislike them <http://summaries.cochrane.org/CD002114/vaginal-weights-for-training-the-pelvic-floor-muscles-to-treat-urinary-incontinence-in-women>

PROLAPSE (including pessary research)

Orejuela et al 2012 Assessing prolapse requires 5-6sec valsalva for 80% of max organ descent, and 9sec for max descent <http://www.springerlink.com/content/g171153080040256/>

Senekjian et al 2011 Only 52% of women presenting to a gynae clinic know the meaning of the term pelvic organ prolapse
http://journals.lww.com/jpelvicsurgery/Abstract/2011/09000/Do_Women_Understand_Urogynecologic_Terminology_.3.aspx

Minaglia et al 2012 only 44% of websites on POP and UI have info that is accurate. Should we warn patients?
http://journals.lww.com/jpelvicsurgery/Abstract/2012/01000/Assessment_of_Internet_Based_Information_Regarding.14.aspx

Shalom et al 2012 Increasing parity only assoc with increased anterior vag wall prolapse, not uterine or posterior wall <http://onlinelibrary.wiley.com/doi/10.1111/j.1447-0756.2011.01718.x/full>

Bo et al Int Urogyn J 2011: Ring pessary alters manometric Ax of resting pressure, but no diff. to max squeeze pressure <http://www.springerlink.com/content/x664583123931161/>

Patel et al 2011: BMI and prolapse grade does not correlate with likelihood of continued pessary use at 12months
http://journals.lww.com/jpelvicsurgery/Abstract/2011/11000/Pessary_Use_and_Impact_on_Quality_of_Life_and_Body.7.aspx

Patel et al 2011: Women with prior POP surgery are less likely to continue pessary use beyond 3-6months
http://journals.lww.com/jpelvicsurgery/Abstract/2011/11000/Pessary_Use_and_Impact_on_Quality_of_Life_and_Body.7.aspx

Apostolis et al 2012: MRI shows Vag Splinting compl corrects POP in 52.9% of women during defec'n and sig impr in 47.1% <http://journals.lww.com/jpelvicsurgery/pages/currenttoc.aspx>

Markle et al 2011: Pt's post hysterect. with TVL <8cm or GH/TVL ratio of >0.9 are unlikely to have successful pessary
http://journals.lww.com/jpelvicsurgery/Abstract/2011/09000/Patient_Characteristics_Associated_With_a.10.aspx

PELVIC FLOOR SURGERY (SUI &/OR POP SURGERY)

Morgan et al 2011: Daily urge UI experienced by just over 1/3 of women following SUI surgery.?Need for pre-op warning.
http://journals.lww.com/jpelvicsurgery/Abstract/2011/05000/Factors_Associated_With_Urge_Urinary_Incontinence.4.aspx

Al-Mandeel et al 2011: Neurourol & Urodyn 24% of women develop de novo SUI 2yrs after a vaginal POP repair. abstract: <http://onlinelibrary.wiley.com/doi/10.1002/nau.20947/abstract>

Klauschie & Jeffrey 2012: FREE FULL TEXT ARTICLE w quiz at end Review of surgical Rx of vault prolapse. Follow link at
http://journals.lww.com/jpelvicsurgery/Fulltext/2012/01000/Surgical_Treatment_of_Vaginal_Vault_Prolapse_A.3.aspx

Book et al 2012: More women (32.4%) have voiding dysfunction following posterior repair than TVT (15%) in first 3 days post op.
http://journals.lww.com/jpelvicsurgery/Abstract/2012/01000/Postoperative_Voiding_Dysfunction_Following.9.aspx

Ramanah et al 2011 Neurourol & Urod: Surgery for POP improves frequency, SUI and voiding dysfunction but not urgency. <http://onlinelibrary.wiley.com/doi/10.1002/nau.21117/abstract>

McLennan et al 2012: Bladder Perforation during TVT higher with vag approach (37.9%) than abdo approach (6.8%)
http://journals.lww.com/jpelvicsurgery/Abstract/2012/01000/Bladder_Perforation_During_Tension_Free_Vaginal.5.aspx

Vollebregt et al 2012: 43% women have worsening of sexual function after ant repair with mesh for cystocele compared to only 18% when mesh isn't used. <http://tinyurl.com/74johha>