Effective management of vaginismus

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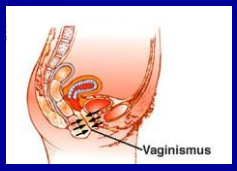
Vaginismus - definition

- Persistent or recurrent difficulty in allowing vaginal entry of a penis, finger and/or any object, despite a woman's expressed wish to do so. [1]
- A syndrome with overlapping elements of
  - Anxiety/fear/panic – sometimes to the point of phobic avoidance
  - Hypertonic pelvic floor muscles (PFM) –> vaginal tightness and difficulty and pain with penetration

1. Weijmar Schultz W, Basson R, Binik Y, Eschenbach D, Wesselmann U, Van Lankveld J: Women's sexual pain and its management. *J. Sex Med*. 2(3), 301–316 (2005).
• A new concentualization of vaginismus is proposed.

Vaginismus is a misnomer

- Term introduced in 1861 by Dr J. Marion Sims
- There is nothing wrong with the vagina!
- Vagina is compressed by tight pelvic floor muscles
- 'Overactive pelvic floor muscles'?



Vaginismus: tight pelvic floor muscles

- Tight pelvic floor muscles cause pain on stretching and prevent or restrict penetration of the vagina by some or all of
  - Tampon – often first sign of a problem
  - Finger (the woman's, her partner's or a PV)
  - Penis
  - Speculum
  - Transvaginal ultrasound probe
- Commonest cause of unconsummated marriage

Variable presentations

- Primary – where vaginal penetration including tampons and intercourse has never been successful
- Secondary – where pain-free penetration was possible in the past but is no longer possible - no age limit
- Total - nothing can be comfortably inserted into the vagina
- Situational - penetration is possible but limited
  - One partner but not another
  - Penis is OK but not tampons or medical examinations
  - Apareunia

Variable causations

- Psychological causation – usually due to fear of pain or trauma
- Mixed causation – an underlying physical problem + the subsequent fear of pain
- Vaginismus can occur in lesbians where the main symptoms are difficulty inserting tampons, fingers, vibrators or dildos and problems with vaginal examinations

Vaginismus is common in sexology practice

- Vaginismus is thought to affect 5 -17% of females in clinical settings [1]
- True prevalence is unknown because many affected women do not present – often a hidden problem
- Cross-cultural problem but primary vaginismus with a psychological basis is more commonly seen in sexually repressive cultures particularly where premarital sex is taboo and virginity at marriage is essential

1. Spector I, Carey M: Incidence and prevalence of the sexual dysfunctions: a critical review of the empirical literature. *Arch. Sex. Behav.* 19, 389–396 (1990).

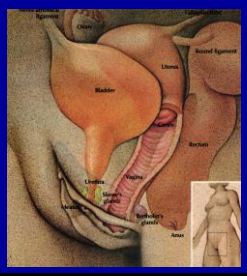
Vaginismus is a paradox

- Involuntary contraction of voluntary muscles
- Involves the muscles just below the skin of the vulva (perineal muscles) and the deeper pelvic floor muscles particularly the pubococcygeus and puborectalis
- On examination chronically shortened, tense and tender pelvic floor muscles are usually found – when penetration is attempted these muscles may "grab" or be constantly tense

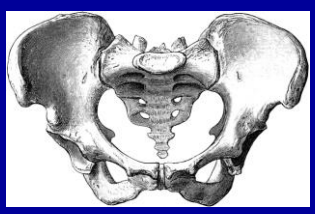
Involuntary PFM contraction - reflex

- Protective mechanism like the corneal reflex/ hand withdrawal
- Anticipation of genital pain causes bracing of the body with contraction of surrounding muscles such as abdomen, buttocks, hips and adductors often squeezing the legs together – all triggers of pelvic floor tension
- Other common anxiety-related triggers of pelvic floor tension:
  - Holding her breath
  - Clenching her jaw
  - Making a fist
  - Tensing the body and moving up and away from the penis in bed

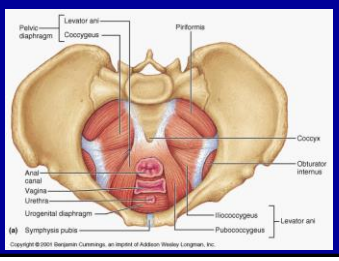
Explaining vaginismus to patients



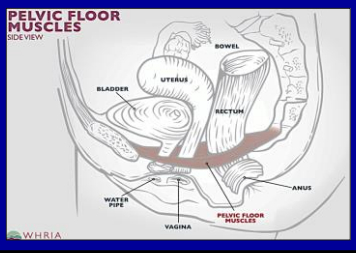
Boney pelvis from above



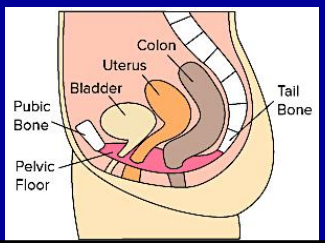
Muscles of the female pelvic floor from above



Pelvic floor muscles are like a hammock between two trees supporting pelvic organs

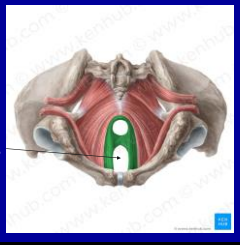


Vagina must pass through pelvic floor muscles

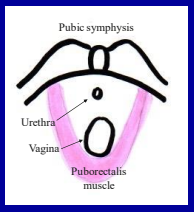


Puborectalis muscle is a U shaped muscle when relaxed

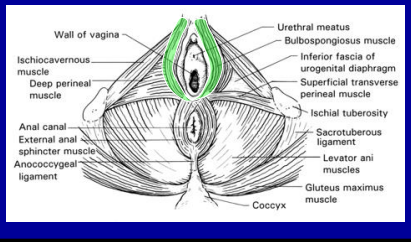
Urogenital hiatus



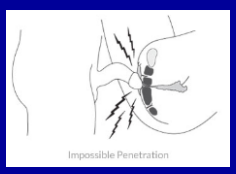
Puborectalis muscle – from a relaxed U to a W

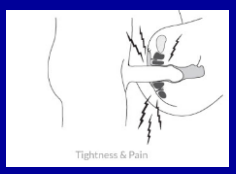


Bulbospongiosus – also U to W shape – drags perineal body body up with it



Vaginismus





Quality of discomfort/pain

- Often burning or stinging
- Tightness or tearing sensation
- Like the penis is "hitting a brick wall"
- Pain may persist for one or more days after attempts at penetration

Fear of harm or trauma

- Many women perceive the pain they experience as very harmful and a sign of great trauma (this is not the case)
- Can result in anxious reactions to attempts at penetration such as crying, hyperventilating, racing heart, sweating, feeling faint
- Fear of pain or harm perpetuates the cycle of muscle contraction -> increased pain -> increased muscle tension etc
- Even the thought of sex can trigger anxiety and pain

Causes of vaginismus

- Usually at the root of vaginismus are physical or non-physical triggers that cause the body to anticipate pain

Psychological contributors to primary vaginismus

- Poor sex education – ignorance
- Sex negative conditioning and attitudes – family, religious and cultural
- Pressure to be a virgin at marriage
- "Horror" stories of deflowering – family, friends, media – fear of severe pain and copious bleeding
- Fear the penis may get stuck or damaged inside the vagina
- Childhood sexual/physical abuse or sexual assault

Psychological contributors to primary vaginismus

- Unrealistic vaginal fantasies
  - Hymen is a thick membrane that covers entire vaginal opening and must be "torn apart" – imperforate hymen = amenorrhoea
  - My vagina is fragile and easily damaged – in fact walls are similar to the hardy lining of the inside of the cheek
  - My vagina is too small for a tampon or a penis – compounded when doctors tell patients they are "small down there" – due to PFM tension
  - No vagina

Psychological contributors to primary vaginismus

- Mental health issues:
  - Anxiety
  - Depression
  - Fears e.g. of pregnancy and childbirth
  - Phobias
  - Relationship difficulties (cause or consequence?)

Psychological contributors to primary vaginismus

- Difficulty with initial tampon insertion and subsequent anxiety
- History of invasive childhood medical procedures - rectal examinations or enemas, throat or ear examinations
- No obvious explanation: no previous history but difficulty and pain with first attempts at penetration trigger the cycle of fear, muscle contraction and pain

Physical contributors to vaginismus

- Superficial or deep dyspareunia from any cause e.g. PID
- Endometriosis – often undiagnosed – associated with dysmenorrhoea, dyschezia and non-menstrual pelvic pain
- Chronic candidiasis – +/- irritation from topical treatments – oral Rx preferred
- Recurrent UTIs requiring antibiotics and subsequent candida
- Discomfort due to inadequate foreplay and sexual arousal

Problems with vulval skin integrity due to hypo-oestrogenisation

- Thinning of skin, dryness, redness, splitting or irritation due to hypo-oestrogenisation
  - Perimenopause, menopause, early menopause or menopause after breast cancer treatment - vulvo-vaginal atrophy (GSM) – Rx Ovestin cream
  - Long term use of low dose OCP or irregular periods e.g. PCOS, amenorrhea – Rx apply pea-sized amount Ovestin to introitus nocte

Physical contributors to vaginismus

- Vulval dermatological conditions – psoriasis, eczema, dermatitis, lichen sclerosus
- Nerve sensitivity at vaginal entrance – vestibulodynia, vulvodynia, pudendal neuralgia
- Childbirth trauma e.g. episiotomy or tear
- Pelvic trauma or surgery e.g. hysterectomy
- Musculoskeletal problems with spine or pelvis
- Irritable bowel syndrome
- Interstitial cystitis

Help seeking behaviours

- Thoughts – stigma associated with vaginismus
  - Feeling of being flawed/ alone/ isolated: “What’s wrong with me? Everyone else out there is is having great sex except me.”
  - “How will I have a baby?”
  - “Will I be alone for the rest of my life?”
  - “It’s so embarrassing – who do I talk to about this?”
- Avoidance of seeking help is common however many patients have seen multiple HCPs before they find appropriate treatment

Doctors’ responses may increase anxiety

- Doctor may look and say “There is nothing to see” = it’s all in your head - unhelpful
- Prescribe anti-fungal medication
- Order a pelvic ultrasound – NAD
- Say
  - “Use a lubricant or local anaesthetic gel”
  - “Do Kegel exercises”
  - “Just relax” or “Have a glass of wine before sex”
  - “Try different positions”
- Prescribe dilators without proper instructions – refer to PF physio

Making the diagnosis

- Take a careful history
- Diagnosis can usually be made on history alone - diagnose underlying disorders
- Examine the patient – take your time - relax the patient - explain what you are doing – you will need a long consultation
- Take a good look at the vulva – she may have more than one condition - cotton bud test for vestibular hypersensitivity
- Exclude organic pathology e.g. vaginal septum, rigid hymen
- If necessary gentle superficial PV with 1 finger to feel pelvic floor tension – physios are good at this – do not insert speculum

Treatment

- Treatment depends on the cause – tailored to the patient
- Psychological intervention: progressive desensitisation - manage feelings of fear and anxiety around penetration – relaxation and mindfulness techniques can help
- Involve the partner if possible
- Treat underlying medical conditions
- Hymenectomy is rarely necessary and Fenton's procedure is unhelpful

Treat vulval pathology

- Treat skin conditions e.g. psoriasis, eczema, dermatitis, lichen sclerosus etc
- Vulval hygiene measures
  - Don't use soap – QV wash, Cetaphil, sorbolene, warm water
  - http://www.caredownthere.com.au/_pages/information_care.html
- Vestibular hypersensitivity elicited by cotton bud test – Rx topical amitriptyline 0.5% and oestriol 0.03% in organogel, 50 mg in pump pack – apply nocte or BD

Treat vulval hypersensitivity

- Roaccutane decreases sebum production –> vulvo-vaginal dryness - QV or Cetaphil intensive moisturising creams or Dermeze cream - not ointments
- Very, very limited place for lignocaine gel until skin condition is fixed – short term use only as vaginismus must be treated

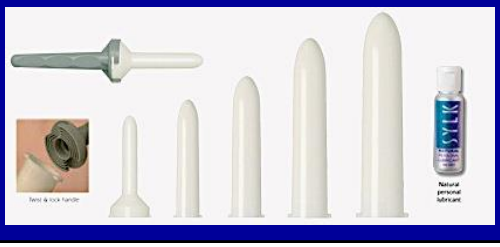
Refer the patient?

- Refer the patient if necessary to
  - Gynaecologist
  - Vulval dermatologist
  - Sex therapist
  - Psychologist/counsellor
  - Psychiatrist
  - Pain specialist
  - Urologist

Management of vaginismus

- Education
  - Explain condition and its probable cause(s)
  - Explain genital and pelvic floor anatomy in detail – be sensitive
  - Genital self examination with mirror either with doctor or at home
  - Locate and identify pelvic floor muscles – contract, hold, relax
  - Vulval hygiene measures
  - Reassure patient this is a treatable condition
- Counselling before or with pelvic floor physiotherapy
  - Sex therapist, psychologist or counsellor for CBT, relationship counselling, treatment for trauma (EMDR), hypnosis or self hypnosis

Vaginal dilators or trainers



Physiotherapy

- Ban on intercourse during physiotherapy
- Encourage sensate focus and/or outercourse - aim is to re-awaken desire and arousal by eliminating the fear of pain – ability to penetrate does not = pleasure
- Start with hamstring stretch to pain as a reference point for the brain to let go of the protection that drives the PFM to contract

Physiotherapy

- Practice contracting, holding and relaxing pelvic floor muscles (biofeedback can be useful)
- Stretching of external pelvic and hip muscles e.g. adductors, piriformis, gluts
- Trigger point releases via PFM massage can be very painful and can traumatise patients – not recommended

Physiotherapy

- Learn to "undo" all factors that tense the pelvic floor
  - Unclench teeth and fists
  - Relax abdomen, buttocks and thighs
  - Breathe – exhalation facilitates penetration
- For dilator work sitting position supported with pillows– upper body is at 45 degree angle to the bed and the abdomen is relaxed
- Alternatively stand with one leg raised on a chair or the bed

Physiotherapy

- Do dilator homework <u>every day</u> except day 1 and 2 of period
- Use lubricant – olive oil or coconut oil
- Always start with smaller dilator and progress to larger
- Contract, hold and relax pelvic floor and insert dilator on relaxation phase – leave for 5 to 10 mins = "static"
- Once comfortable with static try gentle stretch with dilator at 4, 6 and 8 o'clock – "stretch"

Physiotherapy

- When comfortable move to next larger dilator – do static then stretch – gradually progress to larger dilators
- Woman on top position can be helpful for attempting intercourse – woman controls the position, pace and penetration – contraceptive advice – use lubricant
- Contract hold and relax pelvic floor to insert penis
- Problems transferring to the penis: insert dilators in the upright kneeling position with knees wider apart than hips – step up from smallest to larger dilator before attempting intercourse

Botox – Botulinum Toxin Type A

- If women have tried all or some of the above approaches without success and still struggle with vaginismus Botox injections into the pelvic floor muscles under sedation provide a temporary window of opportunity (up to 6 months) to rehabilitate and stretch the tense pelvic floor muscles and also reduce the bulk of the muscles
- May not be suitable for all women e.g. pregnancy planned, BF
- Not on PBS – cost depends on dose required approx $380 per vial

In conclusion

- Vaginismus is a common sexual problem
- Treated by counselling, education, anxiety reduction, pelvic floor muscle relaxation exercises and retraining of pelvic floor muscles
- Treatment may take some months of physiotherapy sessions and practice at home but the success rate of therapy is very high when couples commit to treatment