Chronic Pelvic Pain in Women of Reproductive Age

Justin C Konje

Sidra Medical and Research Center, Doha

Weill Cornell Medical College - Qatar

Weill Cornell Medicine-Qatar

Sidra Medical and Research Center

DISCLOSURE

I do not have any relevant financial or commercial interest to disclose.

Outline of Presentation

- Pain as a symptom – characteristics
- Chronic pelvic pain –definition, prevalence & Management
- Aetiology/Differential diagnoses
- Investigations
- Management of common (specific - gynaecology) causes of CPP
- Conclusion

What is Pain ?

"AN UNPLEASANT SENSORY AND EMOTIONAL EXPERIENCE ASSOCIATED WITH ACTUAL OR POTENTIAL TISSUE DAMAGE"*

* ***International association for the study of pain***

It is the most common symptom of any illness;

Clinicians need to:

- Identify and treat the cause
- But may sometimes have to treat the symptom (pain)
  - whether or not the underlying cause is treatable.

Two types of Pain

- Nociceptive -associated with tissue damage or inflammation, often referred to as '*inflammatory pain*'.
- Non-nociceptive pain resulting commonly from injury to the peripheral or central nervous systems.

Different Types of Pain

Nociceptive Pain (from pain-sensitive structure):

- Somatic origin
- Visceral origin

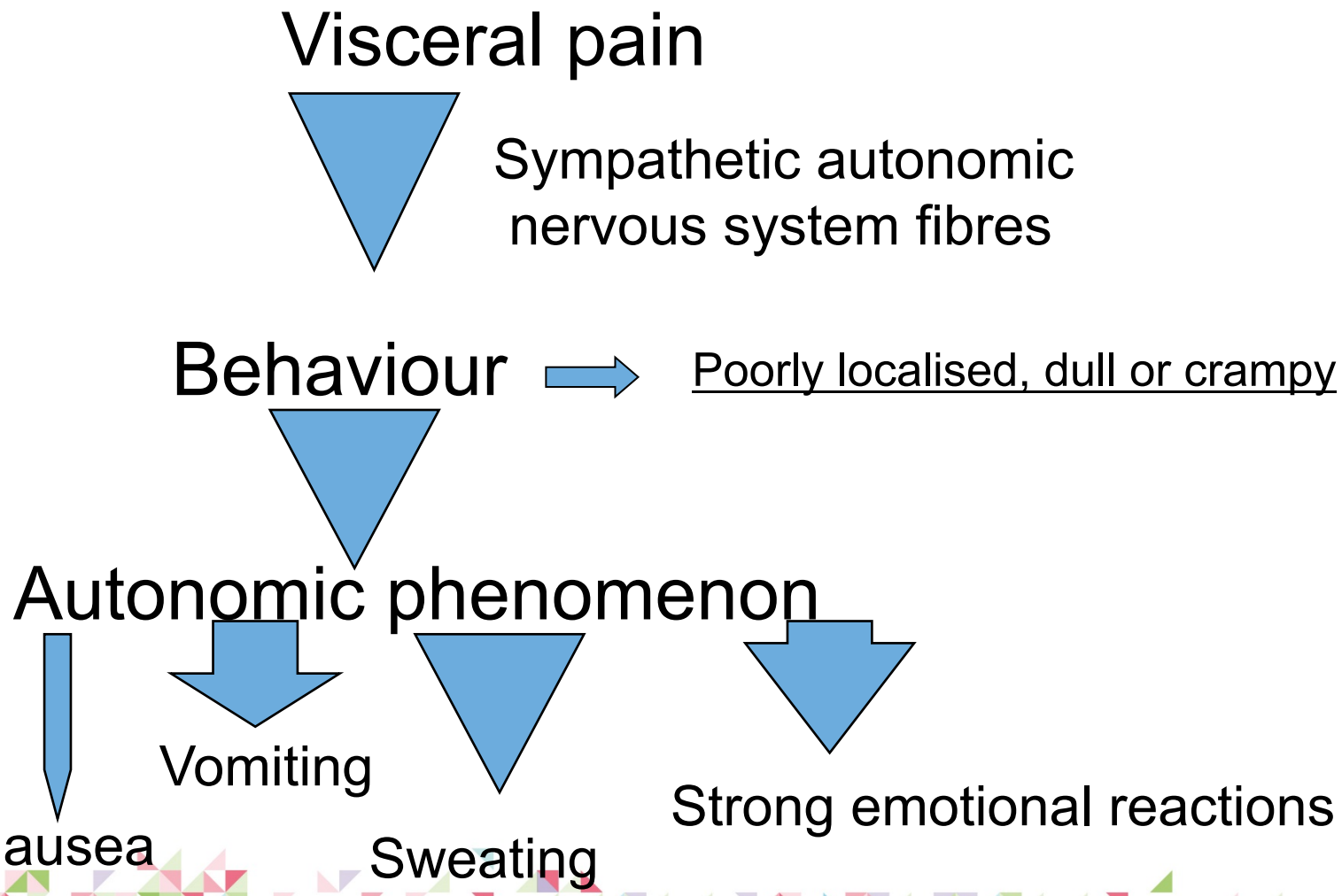
Non-nociceptive Pain

- Neuropathic
- Psychogenic

Types of Pain

- **Nociceptive pain:**
  - Related to activation of primary afferent neurons in response to noxious stimuli (e.g. tissue injury)
  - Level of pain consistent with the degree of tissue injury
  - Subtypes
    - *Somatic:* well localized and described as sharp, aching, throbbing
    - *Visceral:* more diffuse and described as gnawing or cramping

Nociceptive - Visceral Pain



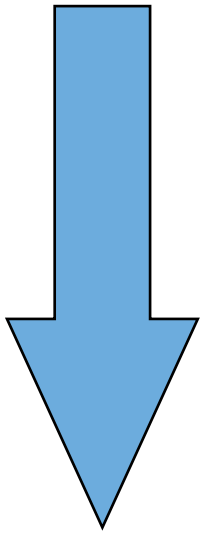
Types of Pain

Non-nociceptive pain

- Neuropathic pain
  - Pain believed to be sustained by aberrant somatosensory processing in the peripheral or central nervous system (e.g. nerve injury)
- Psychogenic pain
  - Pain sustained from psychological factors
  - More precisely characterized in psychiatric terminology
  - Sufferers have affective and behavioral disturbances
  - Those with an organic component often have concurrent psychological contributions and co-morbidities

Nociceptive - Somatic

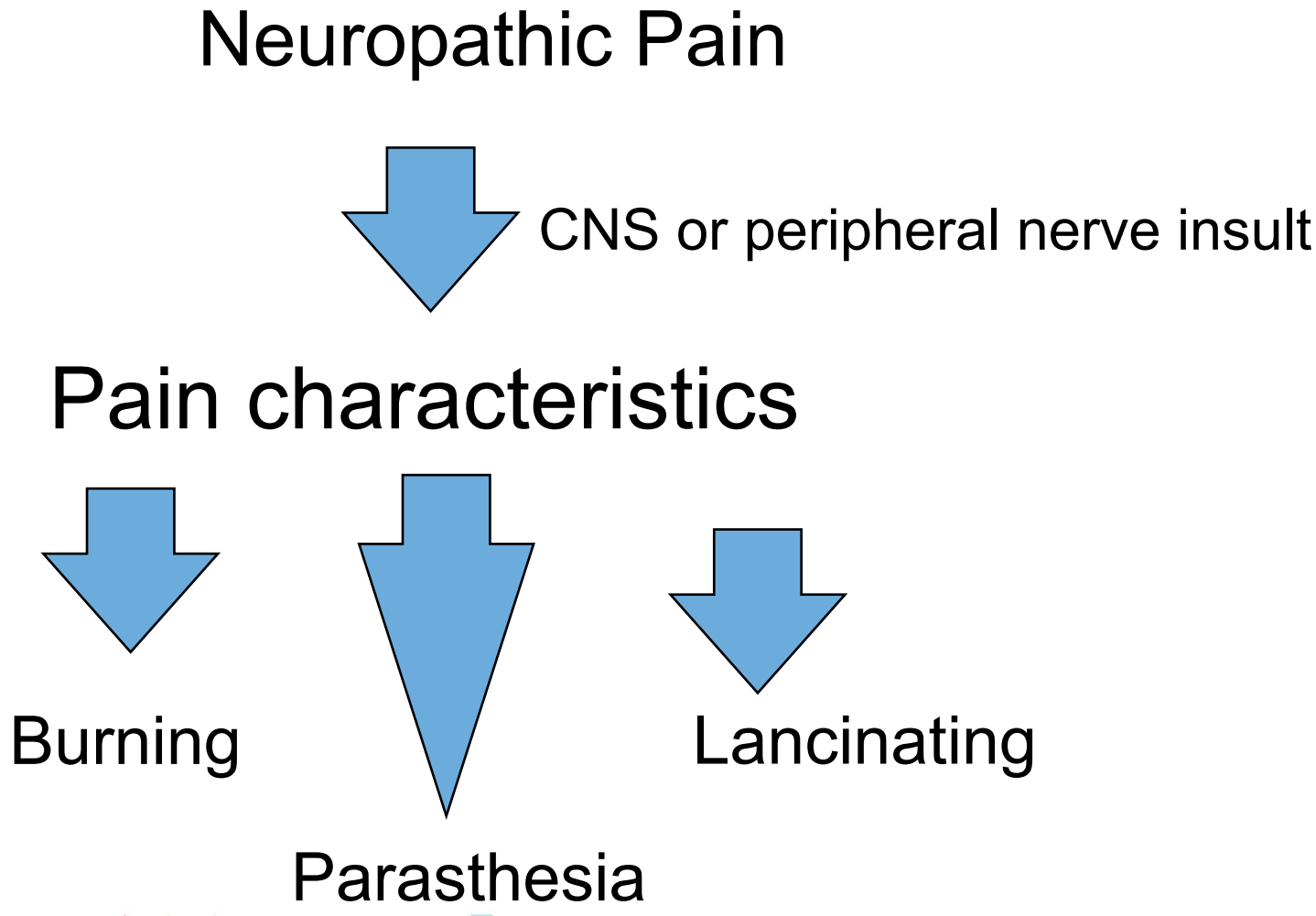
Skin, muscles, bones, joints



Transmitted along sensory fibres

Sharp or dull, usually discrete

Non-nociceptive - Neuropathic Pain



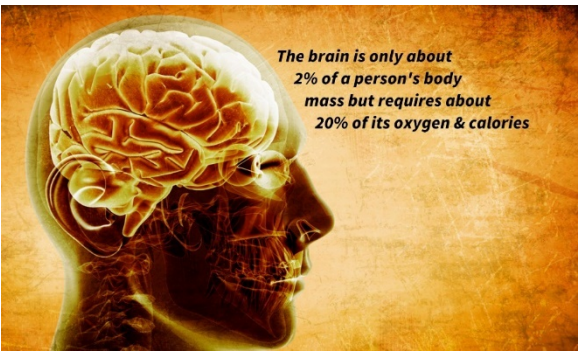
Non-nociceptive - Psychogenic Pain

- No identified mechanism
- Diagnosis of exclusion
- Psychogenic factors
  - Pre-morbid personality
  - Depression
  - Behavioural disturbances

} Have effect on pain experience

Factors Influencing Perception of Pain

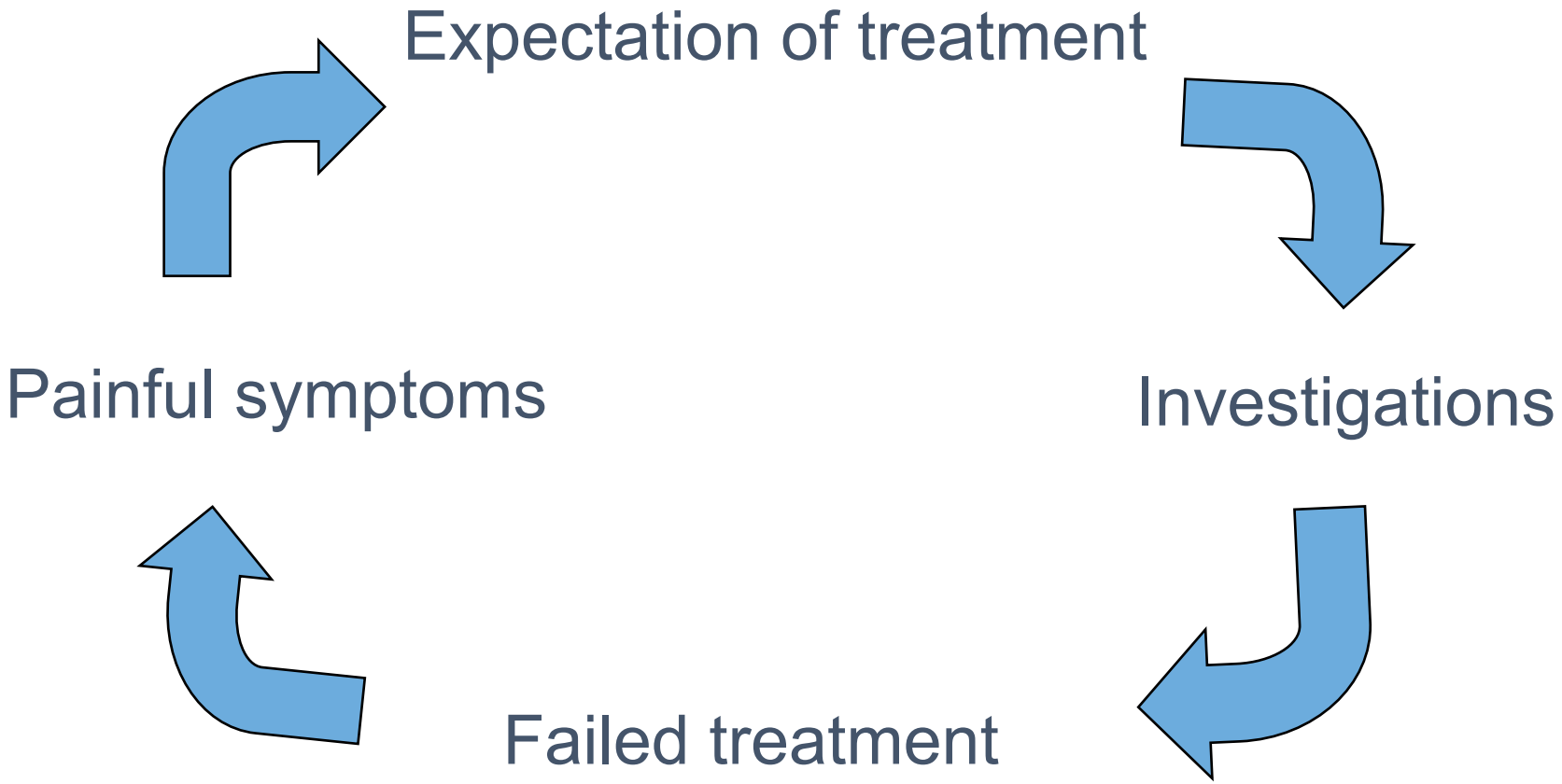
- Emotional state
- Auditory cues
- Visual perception
- Age
- Reproductive history
- Job satisfaction
- Sexual history – especially dysfunction
- Past/current - psychological/physical/sexual abuse
- Family status
- Culture



Principles of Pain Management

- Believe the Patient and show her – gain confidence
- Have Realistic Goals – develop this with the patient
- Institute Adequate Pain Relief
- Identify All Pain Generators
- Setup Appropriate Diagnostic Studies
- Explain the Reasons for Complexity

The cycle of failed pain treatment



What is Chronic Pelvic Pain (CPP)?

Cyclical or non cyclical pain in the lower abdomen or pelvis, of at least six months duration, occurring continuously or intermittently, that causes functional disability or limits activities of daily living i.e. interfere with QOL

- *Daniel JP and Khan K (2010): BMJ 341: c4834 dol:10.1136?bmj.c4834*
- *Royal College of Obstetrician and Gynaecologist, London, Green-top Guideline No 41, 2012*
- *ACOG Practice Bulletin No. 51. American College of Obstetricians and Gynecologists. Obstet Gynecol. 2004;103:589-605.*

CPP a condition that may cause frustration

- Difficult to diagnose
- Difficult to treat
- Difficult to cure

Frustration for patient and physician

Chronic Pelvic Pain (CPP)

Epidemiology

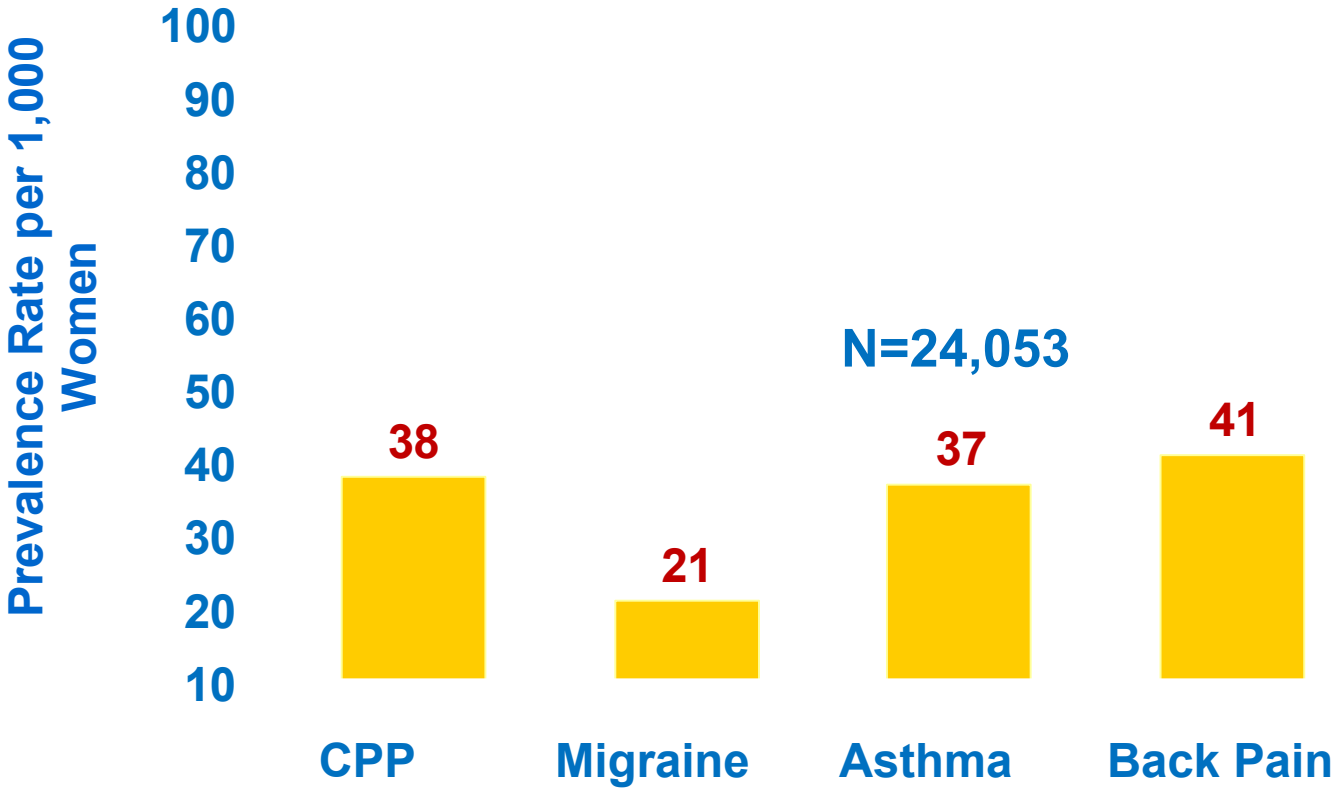
Demographics

- Age, race, ethnicity, education, and socioeconomic status do not differ between those with and without CPP
- Higher incidence in single, separated or divorced women
- 40-50% of women (in the West) have a history of abuse (emotional, sexual or physical)

How Common is CPP?

- Affects 15-20% of women of reproductive age
- Accounts for
  - 20% of all laparoscopies
  - 12-18% of all hysterectomies
- Associated medical costs of > $3 billion annually (in the USA)

Prevalence Comparable to Other Common Medical Problems (UK Data)



Cross-sectional analysis by UK Mediplus Primary Care database.

Zondervan KT et al. Br J Obstet Gynaecol. 1999:106;1149-1155.

CPP is a Significant and Common Disorder in Women

- Magnitude of CPP
  - >9 million women in the United States affected[1]
  - 20% had pelvic pain >1 year in duration[2]
- CPP accounts for
  - 10% of referrals for OB/Gyn visits[3]
  - Over 20% of laparoscopies[4]
  - 12 -18 % of hysterectomies[5]
- Patients with CPP have significantly lower general health scores compared with patients without CPP[1]

1. Mathias SD et al. *Obstet Gynecol*. 1996;87:321-327.
2. Jamieson DJ, Steege JF. *Obstet Gynecol*. 1996;87:55-58.
3. Reiter RC. *Clin Obstet Gynecol*. 1990;33:130-136.
4. Howard FM. *Obstet Gynecol Surv*. 1993;48:357-387.
5. Carlson KJ et al. *Obstet Gynecol*. 1994;83:556-565.

Medical costs for CPP

- Direct outpatient medical costs for CPP:
  - Total annual direct costs > $3.0 billion/year[1]
- 15% of women with CPP missed >1 hr paid work/ month[1]
  - Cost of work time lost for CPP >$555.3 million/year

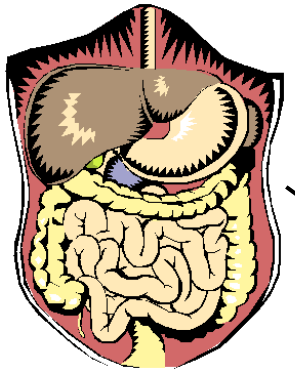
1. Mathias SD et al. Obstet Gynecol. 1996;87:321-327.

Predisposing factors to CPP

- Drug and alcohol abuse
- Miscarriage
- Heavy periods
- Previous caesarean section
- Pelvic pathology
- Abuse (physical, emotional and sexual)
- Psychological co-morbidities e.g. Sleep disturbance, fatigue
- Etc.

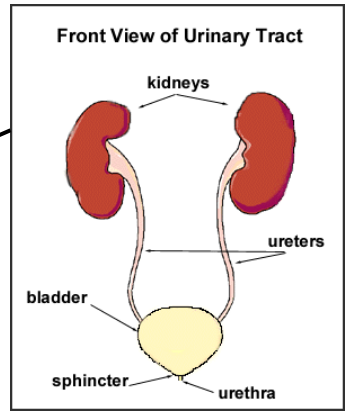
Aetiology – Multifactorial

Gastrointestinal

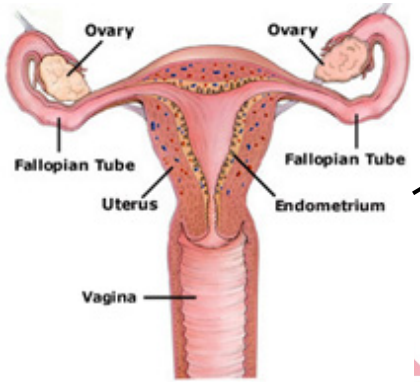


Psychological

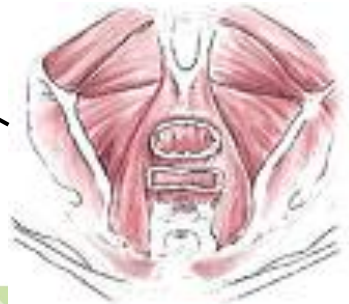
Urological



Gynecological



Musculoskeletal



Aetiology of CPP : Gynaecological

- Pelvis
  - Pelvic adhesions
  - Endometriosis (17-72%)
  - Pelvic congestion syndrome
  - Neoplasms (fibroid or malignant)
  - Tuberculous salpingitis
- Ovary
  - Benign cysts
  - PCOD
  - Ovarian remnant syndrome
  - Periovarian adhesions
- Uterine
  - Dysmenorrhea (congestive and spasmodic)
  - IUCD
  - Uterovaginal prolapse
  - Endometrial or cervical polyp
  - Adenomyosis
  - Chronic endometritis
- Others
  - Vulvodynia
  - Sciatic hernia
  - Post sterilisation tubal torsion

Aetiology of CPP : Non-gynaecological

- GIT
  - IBS
  - Inflammatory Bowel disease (Crohn's, ulcerative colitis, diverticulitis)
  - Hernias
- GUS
  - UTI
  - Urethral obstruction
  - Calculus
  - Diverticulitis
  - Malignancy
  - Interstitial cystitis
- CNS
  - Nerve entrapment syndrome
  - Neuroma/ pudendal neuralgia
  - Piriformis syndrome
  - Post herpetic neuralgia
- Musculoskeletal
  - Prolapsed disc
  - Degenerative spinal disease
  - Faulty or poor posture
  - Myofascial pain syndrome
  - Pelvic floor dysfunction
- Psychogenic
  - Sexual victimisation
  - Drug abuse
  - Major depression
- Idiopathic

Data from the United Kingdom Primary Care

Diagnosis Distribution

Gastrointestinal	37.7 %
Urinary	30.8 %
Gynecological	20.2 %

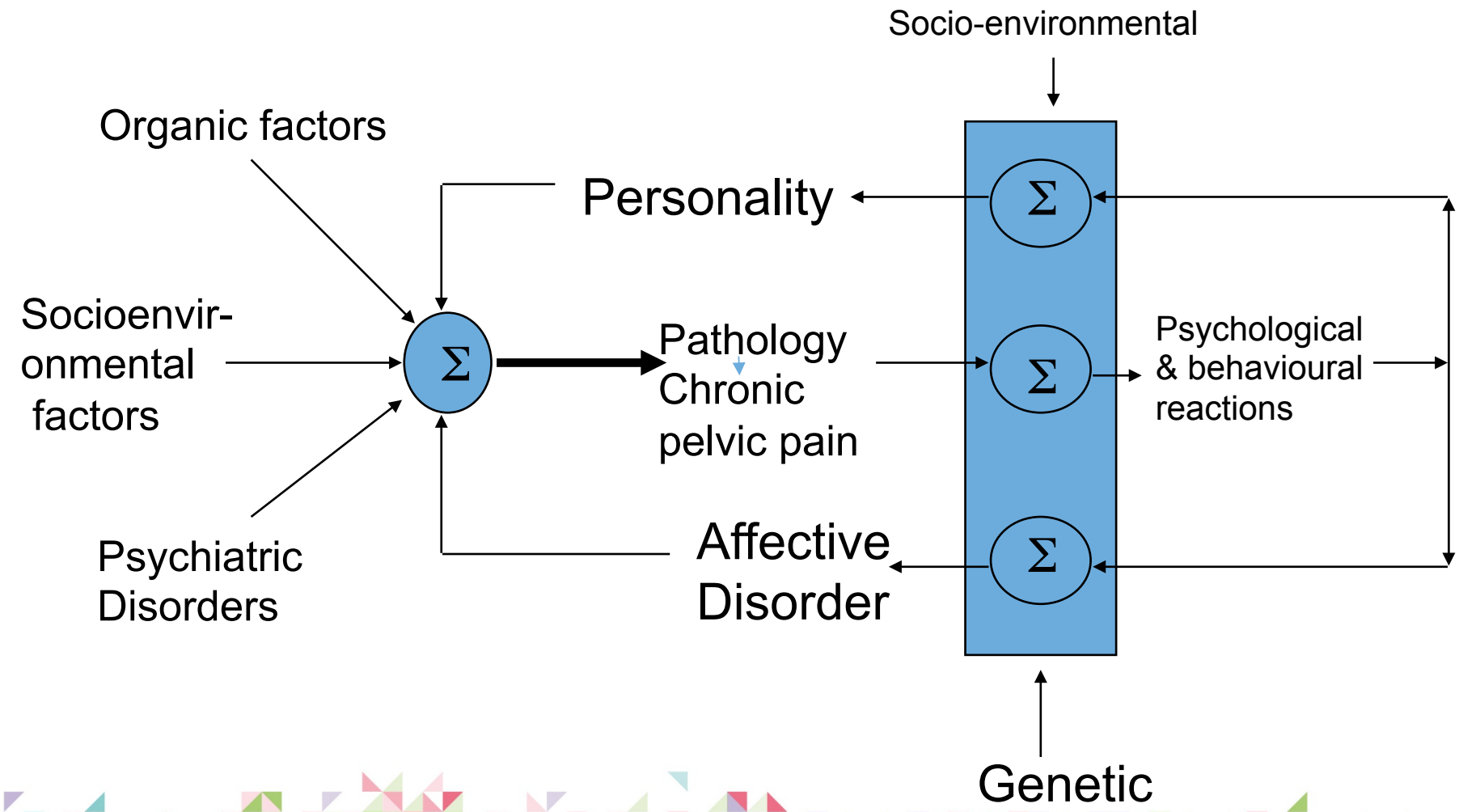
- 25-50% of women had more than one diagnosis
- Severity and consistency of pain increased with multisystem symptoms
- Most common diagnoses:
  - endometriosis
  - adhesive disease
  - irritable bowel syndrome
  - interstitial cystitis

Cross-sectional analysis by UK Mediplus Primary Care database.

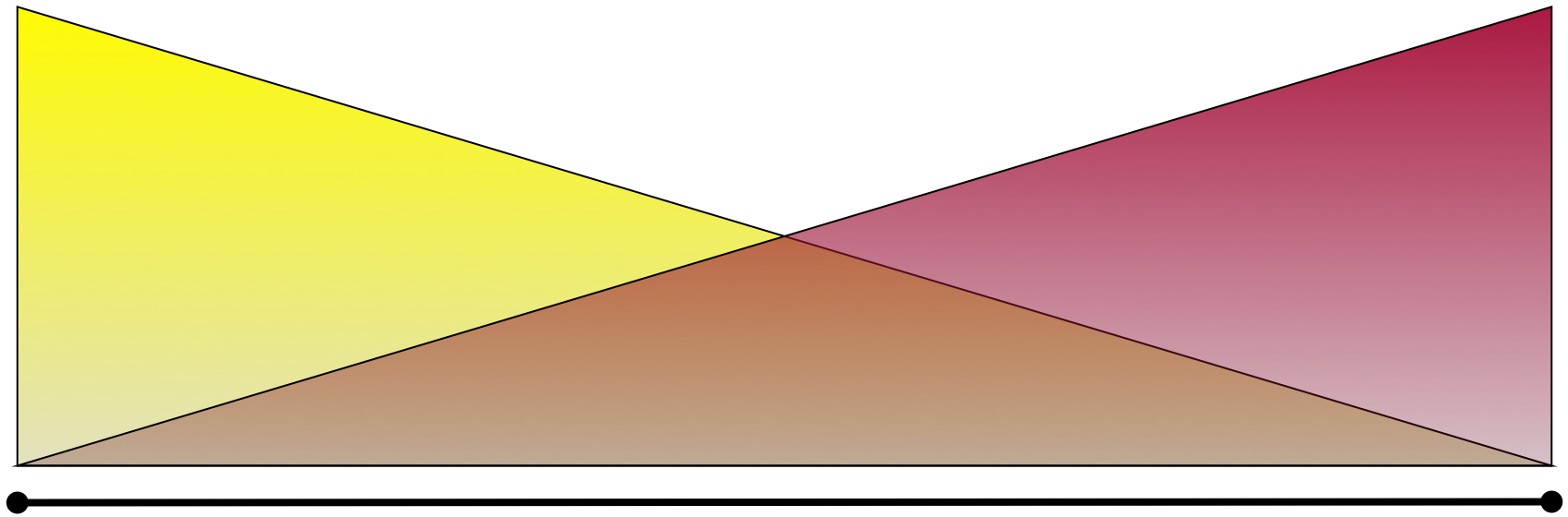
Zondervan KT et al. Br J Obstet Gynaecol. 1999:106;1149-1155

Management of Patients Presenting with CPP

Composite relationships in CPP



Physical vs. Psychological



Systematic evaluation of the pain involves the following

- Take a detailed history of the pain including an assessment of the pain intensity and character
- Evaluate the psychological state of the patient, including an assessment of mood and coping responses
- Perform a physical examination with emphasizes on bimanual pelvic examination
- Appropriate diagnostic workup to determine the cause of the pain which may include tumour markers, radiologic studies, scans etc.
- Targeted/customized therapy.

Quantification of Pain

- Always try to quantify pain
  - Different rating scales available.
    - Categorical scales e.g., verbal rating scales: mild, moderate, severe pain
    - Visual analogue scale (VAS)
    - Complex pain assessment
    - Brief Pain Inventory (BPI),
    - McGill Pain Questionnaire.
  - These rely on the *subjective assessment* of pain by the patient and therefore make inter-individual comparisons difficult.
  - Do not forget that pain is a multidimensional complex phenomenon and is *not* adequately described by *unidimensional scales*

The initial evaluation of pain should include a description of pain using PQRST criteria

- *P: Palliative or provocative factors*, 'What makes it better or worse?'
- *Q: Quality*; " What is it like?"
- *R: Radiation*; "Does it radiate anywhere?"
- *S:Severity*; "How severe is it?"
- *T: Temporal factors*; (Is it there all the time or it does come and go and how it related your periods?"

Pain

- Assessment of pain
  - Location (mapping)
  - Timing & frequency characteristics
  - Provocative & palliative factors
  - Chronology and relationship to the menstrual cycle
  - Emotional response and reaction of family & friends
  - Psychological characteristics

Evaluation of CPP

History – effective leads to alleviation of symptom in 50% of cases

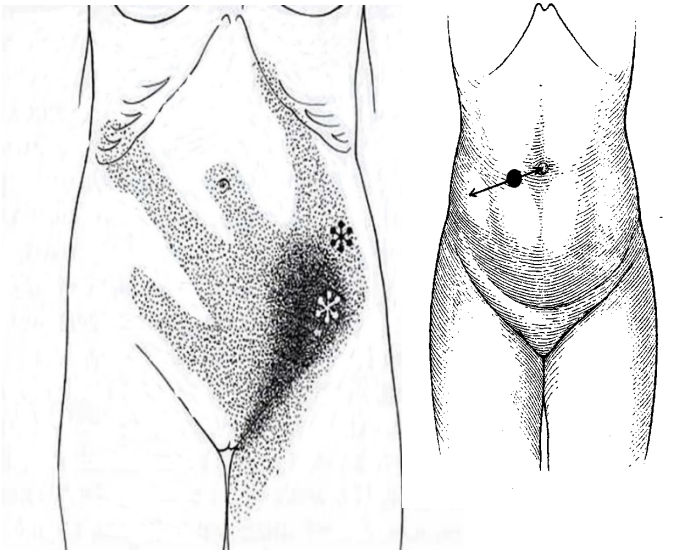
- Listen, be sympathetic & show understanding
- Thought derailment, body language
- Childhood, parental & sexual experiences
- Organic causes : Vaginal discharge & PID
- Previous treatment profile (medical & surgical results)
- Psychiatric disturbances/depression/attempted suicide
- Relationship to diet, GIT etc
- Social & cultural belief of patient pain

Psychological Co-Morbidity Assessment

- Clinical
  - Enquiry about things at home
  - Sleep pattern
  - Appetite disturbance
  - Tearfulness
- Validated symptom based tools
  - HAD (Hospital and anxiety Depression) Score
  - SF-36
  - McGill questionnaire
  - Quality-adjusted life years (QUALYs) score

Physical Examination

- General condition
  - Attention to posture, gait, facial grimacing & overall general countenance
  - Exclude malignancy
  - ‘Trigger point’ and neurological exam.
  - Palpable (tender colon)



Pain mapping: illio-inguinal & genito-femoral nerves

- Psychological assessment: McGill pain & Middlesex Hospital questionnaires, SF-36 & HAD score

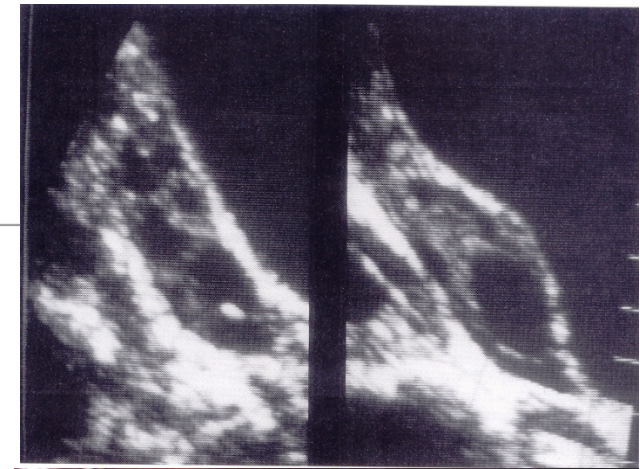
Pelvic examination

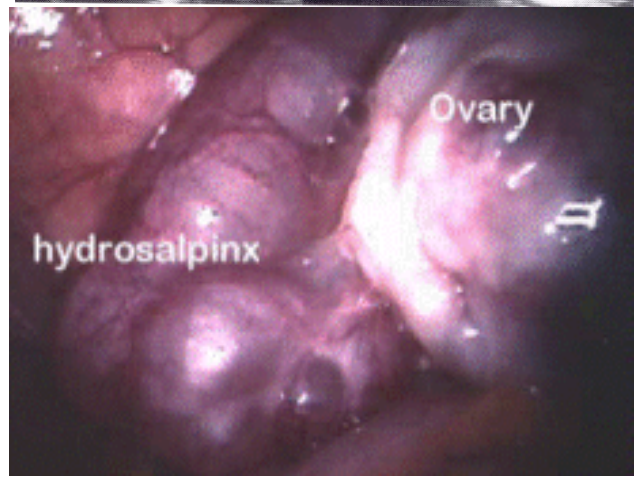
- Inspection
  - Lesion & point tenderness
  - Vulva, vestibule, urethra
- Pain + absence of physical changes = probably vulvodynia

Digital

- One finger
  - Assess Pelvic floor Muscles
  - Vaginismus - painful spasms of the pelvic floor muscles (levator ani, obturator, pubococcygeus, deep & superficial perineal muscles)
  - Palpate the vagina anteriorly & the base of bladder trigone (exquisitely tender ?bladder pain syndrome or IC)
- Bimanual & RV septum exam :
  - Uterine & adnexal tenderness, masses

Investigations





- USS
  - Endometrioma, hydrosalpinges, Adnexal masses
- Laparoscopy
  - Confirm endometriosis is 70-80% of women with CPP
  - Pain mapping
- Psychological/metric assessment
  - McGill's, SF-36, HAD, Middlesex Hospital Questionnaire (Justification/why?)
- Local injection trials
  - Trigger point injections
- Bladder investigation
  - MSU, Voiding diary, Urine makers (Antiproliferative factor)
  - Cystoscopy: Bladder glomerulation (petechial submucosal bladder heamorrhage), Hunner's ulcer, decreased cystometric compliance
  - KCl sensitivity test (Parsons test: IC)
- Hormone suppression test (GnRH-a)

CPP and laparoscopy

- 40% of laparoscopies performed by gynaecologists are for CPP
- No visible pathology is identified in 35% of women
- Endometriosis is detected in 33%
- Adhesions are detected in 24%
- ?Pelvic congestion in about 31%

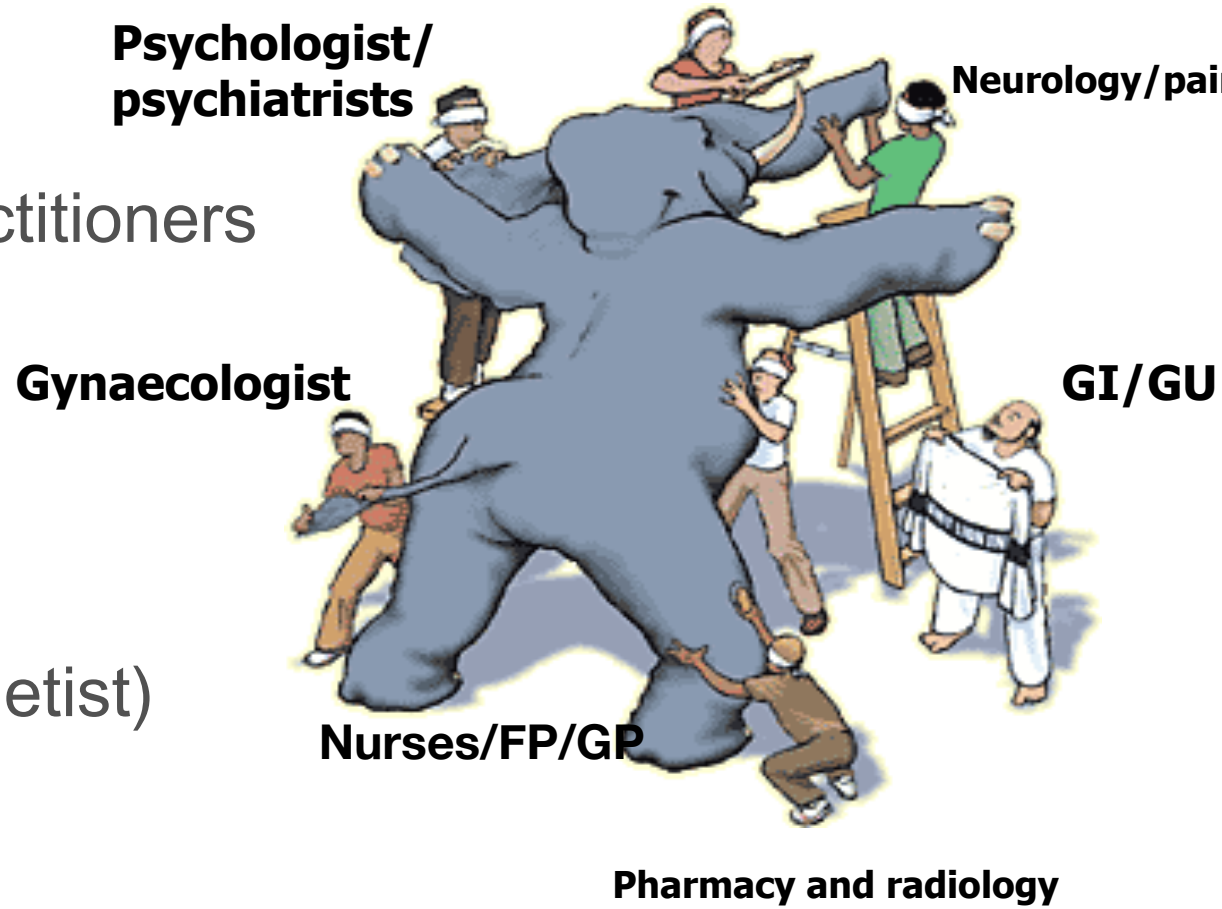
Howard FM (2000) : Baillieres Best Pract Res Clin Obstet Gynaecol 14: 467-94

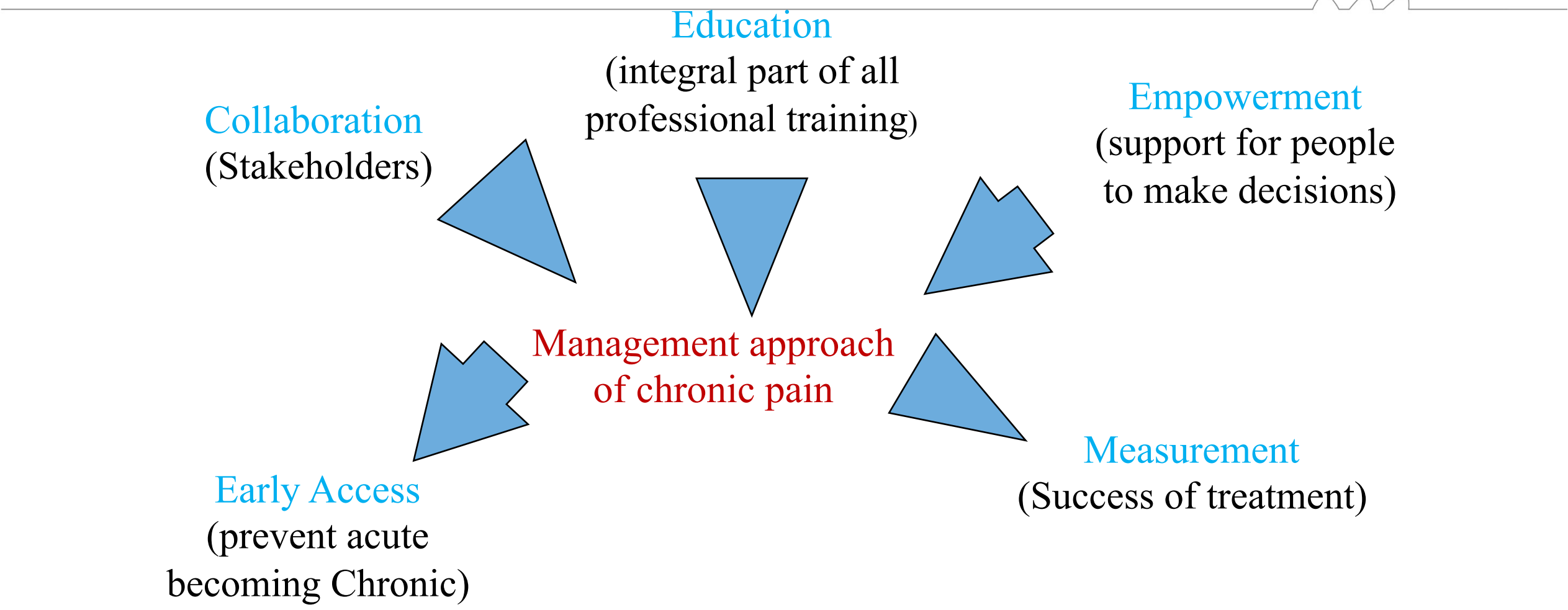
Soysal ME et al (2001) Hum Repr 16: 931-939

Treatment of CPP

Multidisciplinary

- Nurses and Family Practitioners
- Gynaecologists
- Health psychologists
- Pain clinicians (anaesthetist)
- Physiotherapists
- Psychiatrists





Chronic Pain Policy Coalition (2006)

Treatment options

- Non invasive therapy
- Pharmacologic management
  - Analgesic
  - Adjuvants
  - Disease specific medications
  - Hormonal manipulations
- Invasive therapies
  - Injections
  - Surgical procedures

Non-invasive therapy

- Exercise programme
- Cognitive/behavioural therapy
- Physical therapy (70% improvement)
- Nutrition : Dietary modifications; caffeine, & alcohol trigger IC & IBS
- Massage
- Acupuncture

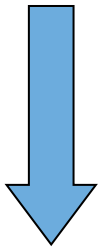
Pharmacological agents: Analgesics & Adjuvants

- Analgesics
  - Non opiod: NSAID alone
  - NSAID + mild Opoids: e.g. tramadol, codeine
  - Opoids: morphine, methadone (long half life)
    - Side effects: tolerance, dependence, addiction, respiratory depression
- Regular frequent assessment for continued therapy
- Adjuvants
  - Tricyclic antidepressants e.g Venlafaxine in neuropathic conditions or IC in the USA but not in UK
  - Anticonvulsants (neuropathic pain): Gabapentin, lamotrigine,
  - Muscle relaxants: (pelvic floor dysfunction) Tizanidine

Pharmacological agents: Hormonal manipulation

- Menstrual suppression of cyclic component to pain
  - COC
  - POP
  - GnRH-a

3-6 months trial



Improvement

- Endometriosis
- IC
- Pelvic congestion
- Ovulatory dysfunction

Invasive therapy

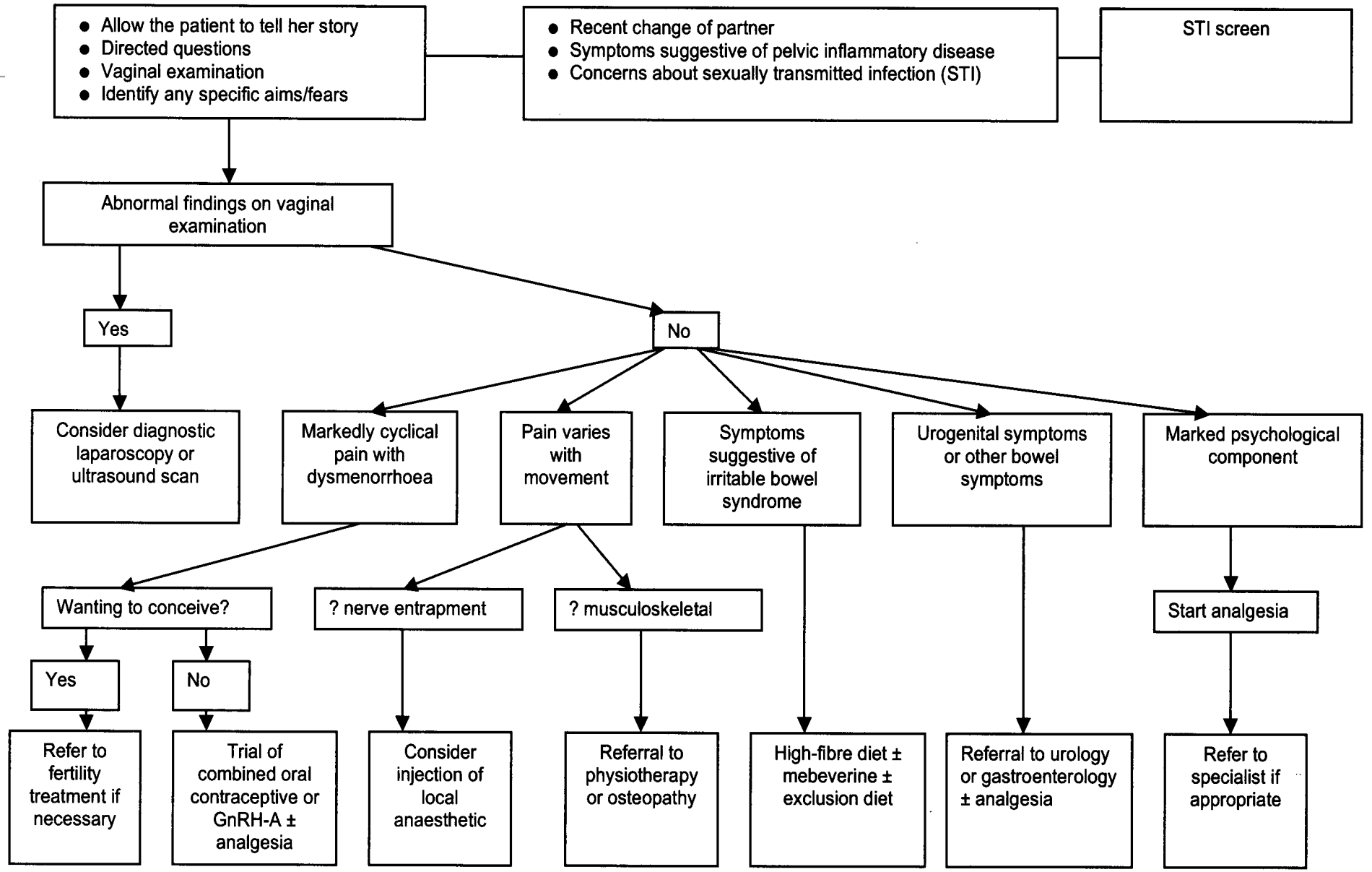
- Injections: Myofacial pain / Trigger point in the abdominal wall
  - Bupivacaine
  - Botulinum toxin A (temporary muscle paralysis due to mediators in neurogenic inflammation
  - Uses: Myofascial pain, IC, Overactive bladder (bladder muscle injection)
- Nerve blocks: Pudendal & Genitofemoral & illioinguinal

Surgery: Specific

- Neuroablative procedures for IC through S3 nerve root
- Laparoscopic surgery
- Hysterectomy
  - Failure to relief pain associated with
    - Lack of pelvic pathology
    - Age less than 30 years
    - Depression
    - Psychologic problem

Marchbank et al (1995): Obstet Gynecol 86: 941-945

Flowchart for the suggested management of chronic pelvic pain



Dysmenorrhoea

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Sidra Medical and Research Center
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Dysmenorrhoea

Pain in association with menstruation may be primary or secondary.

- *Primary dysmenorrhoea* classically commences with the onset of ovulatory menstrual cycles and tends to decrease following childbirth
- ***Secondary dysmenorrhoea*** – occurs classically sometime after the onset of menstruation (occasionally with menstruation)
- Associated with a pelvic pathology

Primary Dysmenorrhoea

- ***Description:*** Pain associated with menses; onset 1-3 days prior to the onset of menses; last 1-3 days

- ***Risk Factors:*** Nulliparity, Young Age, Heavy menstrual Flow, Cigarette Smoking

- ***Symptoms:*** Crampy lower abdominal pain; +/- nausea, emesis, diarrhoea or headache, normal physical exam

- ***Treatment:*** NSAIDS, B6, B1, Hormonal Therapy (OCPs, OrthoEvra, Nuvaring, Mirena IUS, Depo-Provera

Dysmenorrhoea

- Primary dysmenorhoea
  - Suppression of ovulation using the oral contraceptive pill reduces dysmenorrhoea dramatically in most cases.
  - Because of the chronic nature of the condition, potentially addictive analgesics should be avoided.
    - Explanation and reassurance may be helpful,
    - together with the use of simple analgesics progressing
    - to the use of non-steroidal anti-inflammatory drugs (NSAIDs), which are particularly helpful if they are started before the onset of menstruation.
- **Secondary dysmenorrhoea -**suggest the development of a pathological process, and the exclusion of endometriosis and pelvic infection is essential
  - Treatment depends on the cause

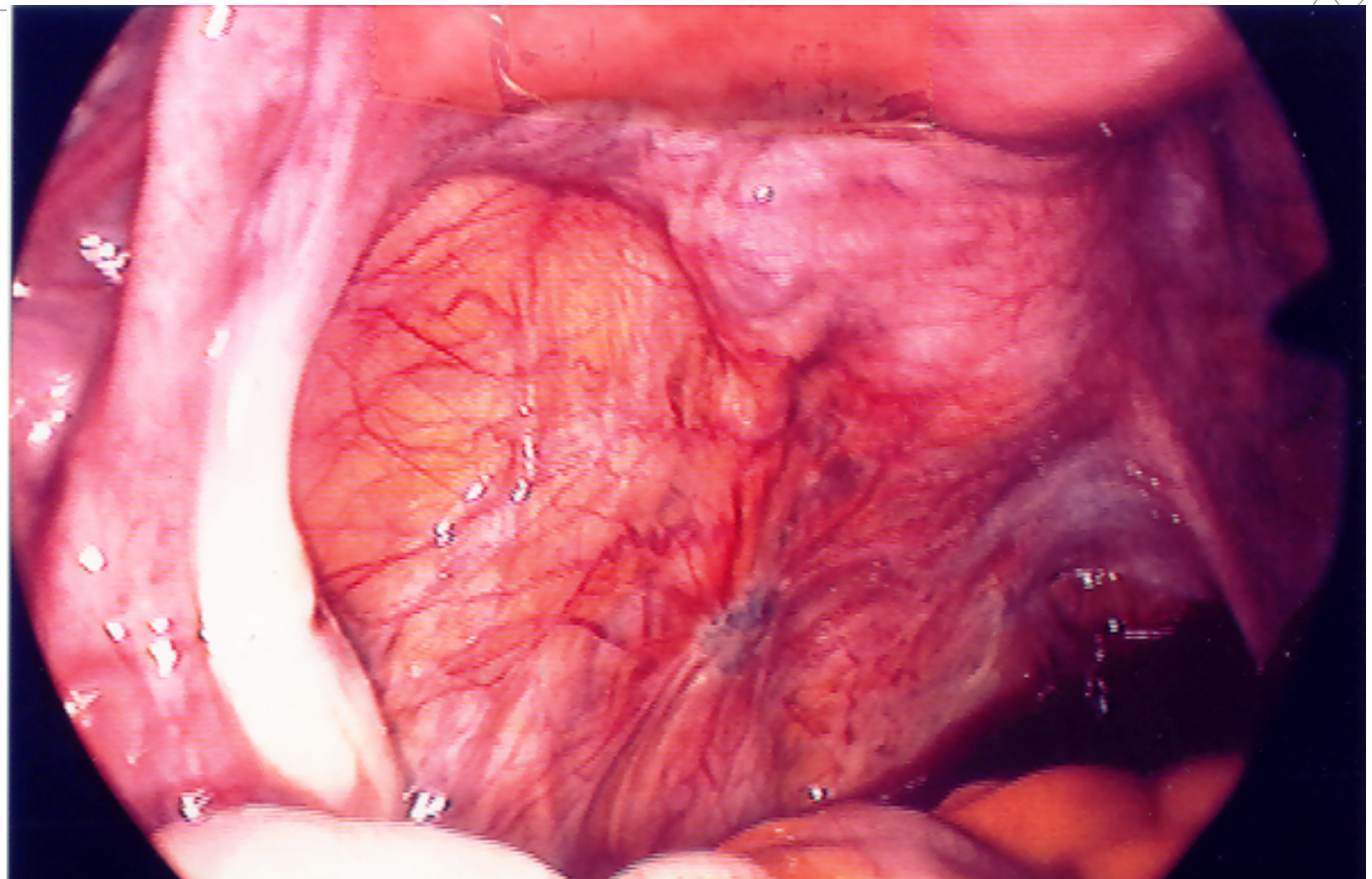
Endometriosis (pelvic)

Definition

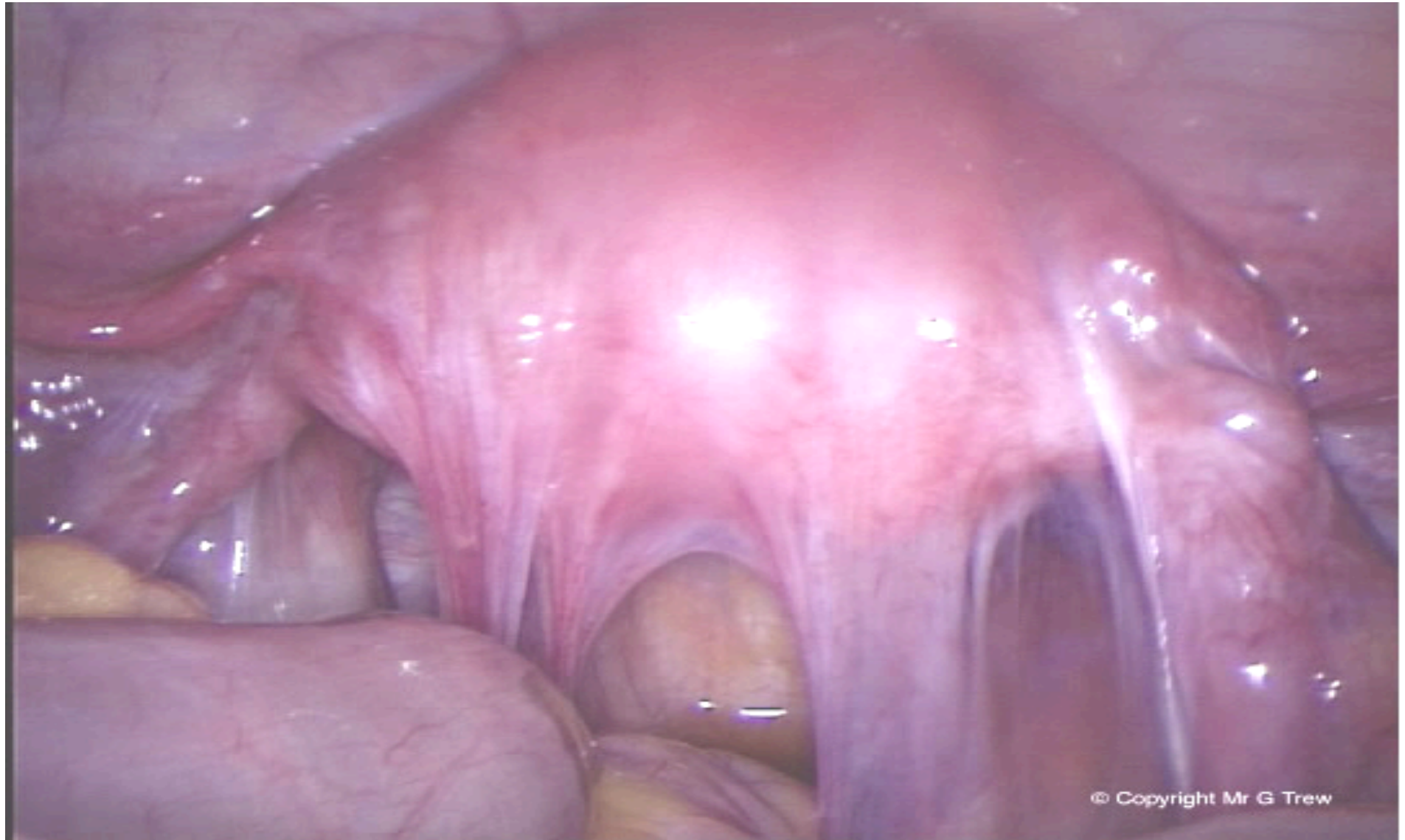
The presence of endometrial glands and stroma

(functional endometrium) outside the uterine cavity

Endometriosis – different phenotypes



Endometriosis – different phenotypes



Endometriosis - Prevalence

- Occurs typically in women age 25 -35 years
- Diagnosed in approximately 45% of women undergoing laparoscopy for any indication
- Diagnosed in approximately 30% of women undergoing laparoscopy with primary complaint of chronic pelvic pain
- Found in 38% of women with infertility
- Family history increases risk seven to ten-fold
- Significant cause of morbidity

Endometriosis: Signs and Symptoms

Symptoms

- Dysmenorrhea
- Dyspareunia
- Infertility
- Intermenstrual Spotting
- Painful Defaecation
- Pelvic Heaviness
- Asymptomatic

Signs

- Visible lesions on cervix or vagina
- Tender nodules in the cul-de-sac, uterosacral ligaments or rectovaginal septum
- Pain with uterine movement
- Tender adnexal masses (endometriomas)
- Fixation (retroversion) of uterus
- Rectal mass
- Normal findings

Endometriosis

- Affects 2-10% of reproductive age group (Barbieri et al 1990)
- Occurs in 20-40% if infertile population (Mahmood & Templeton 1991)
- Mean symptom diagnosis interval:
  - UK 8 years
  - USA 11.7 years

Hadfield et al (1996): Hum. Reprod 11: 878-80.

Endometriosis - Diagnosis

- Diagnosis can be made on clinical history and exam
- Serum CA125 may be elevated but lacks sufficient specificity and sensitivity to be useful

- Imaging studies lack sufficient resolution to detect small endometrial implants

- Laparoscopy is gold standard for diagnosis
  - Multiple appearances: red, brown, scar, white, powder burn, adhesions, defects in peritoneum, endometriomas
  - Allows diagnosis and treatment

Treatment of Endometriosis

Factors affecting treatment

- Age
- Symptoms
- Reproductive status
- Fertility demands

Treatment

- Medical
- Surgical
- Psychotherapy
- Combination

Endometriosis - Medical Treatment

- NSAIDS for mild disease
- ***First Line:*** Oral contraceptives
  - Suppress ovulation and menstruation
  - Cyclical or continuous
  - Improves symptoms in up to 80%
  - Progestogens (oral or Levonorgestrel IUS – Mirena)
- ***Second Line: GnRH agonists*** e.g. Lupron Depot (x 6-12 months)
  - Improves symptoms in up to 80%
  - Side effects: hot flashes, vaginal dryness, insomnia, bone loss irritability
  - "Add back" therapy – Livial or combined HRT

Surgery

- Laparoscopic
- Laparotomy
- Robotic

Surgery

Laparoscopic

- Ablation of endometriosis
  - Diathermy
  - Laser vaporization
- Excision
- Ovarian cystectomy ± Adhesiolysis: severe
- ?Presacral neurectomy

Mild to moderate

Endometriosis: Surgical Treatment

- ***Laparoscopic Removal or Destruction***
  - Treatment at time of diagnosis
  - Used in conjuction with medical treatment
  - Improves pain in up to 70% of patients

- ***Laparotomy (TAH/BSO)***
  - Inadequate response to medical treatment or conservative surgical treatment with no desire for future fertility
  - May preserve ovaries in young women, but 30% with recurrent symptoms

- ***Laparoscopic Uterosacral Nerve Ablation (LUNA), Presacral neurectomy***
  - Involves transecting the nerve plexus at the base of the cervical-uterosacral ligament junction

Pelvic Infections (PID)

Pelvic Infections (PID)

- Caused typically by *Chlamydia trachomatis* and *Neisseria gonorrhoea*, as well as vaginal and genital tract pathogens.

- Patient's sexual contacts will need to be traced in all cases with positive cultures. If there is doubt about the diagnosis then laparoscopy may be of great assistance.

- The treatment of infection depends on the causative organisms.

Pelvic Infections (PID)

- Subclinical *Chlamydia trachomatis* infection may lead to tubal pathology. Screening for this organism in sexually active young women may reduce the incidence of subsequent subfertility.

Pelvic Infections (PID)

- ***Risk Factors***
  - Multiple sexual partners
  - Greater than 2 sexual partners in past 4 weeks
  - New partner in the past 4 weeks
  - Prior history of PID
  - Prior history of gonorrhea or chlamydia
  - Smoking
  - None or inconsistent condom use

Pelvic Infections (PID)

- ***Treatment:*** Depends on the organism common in the environment and its sensitivity. Multiple inpatient or outpatient antibiotic regimens; total therapy for up to 14 days

- ***Sequelae***
  - Infertility
  - Ectopic Pregnancy
  - ***Chronic Pelvic Pain***
    - Occurs in 18-35% of women who develop PID
    - May be due to inflammatory process with development of pelvic adhesions

Pelvic Congestion Syndrome

- ***Description:*** Retrograde flow through incompetent valves venous valves causing tortuous and congested pelvic and ovarian varicosities; aetiology unknown.
- Worse in women with migraine (pelvic migraine)
- ***Symptoms:*** Pelvic ache or heaviness that may worsen premenstrually, after prolonged sitting or standing, or following intercourse
- ***Diagnosis:*** CT, MRI, ultrasound, laparoscopy Pelvic venography (historic)
- ***Treatment:*** Progestogens, GnRH agonists, ovarian vein embolization or ligation, and hysterectomy with bilateral salpingooophorectomy (BSO)

Pelvic Floor Pain Syndrome

- ***Description:*** Spasm and strain of pelvic floor muscles
  - Levator Ani Muscles
  - Coccygeus Muscle
  - Piriformis Muscle

- ***Symptoms:*** Chronic pelvic pain symptoms; pain in buttocks and down back of leg, dyspareunia

- ***Treatment:*** Biofeedback, Pelvic Floor Physical Therapy, TENS (Transcutaneous Electrical Nerve Stimulation) units, anxiolytic therapy, cooperation from sexual partner

Differential Diagnosis: *Urological* Conditions that may Cause or Exacerbate Chronic Pelvic Pain

Level A

- Bladder Carcinoma
- Interstitial Cystitis/Painful bladder syndrome
- Radiation Cystitis
- Urethral Syndrome

Level B

- Detrussor Dyssynergia
- Urethral Diverticulum

Level C

- Chronic Urinary Tract Infection
- Recurrent Acute Cystitis
- Recurrent Acute Urethritis
- Stone/urolithiasis
- Urethral Caruncle

Painful Bladder syndrome

- ***Description:*** Chronic painful condition of the bladder

- ***Etiology:*** Loss of mucosal surface protection of the bladder and thereby increased bladder permeability

- ***Symptoms:***
  - Urinary urgency and frequency
  - Pain is worse with bladder filling; improved with urination
  - Pain is worse with certain foods
  - Pressure in the bladder and/or pelvis
  - Pelvic Pain in up to 70% of women
  - Present in 38-85% presenting with chronic pelvic pain

Painful Bladder Syndrome

- ***Diagnosis:***
  - Cystoscopy with bladder distension
  - Intravesicular Potassium Sensitivity Test
  - Presence of glomerulations (Hunner Ulcers)

- ***Treatment:***
  - Avoidance of acidic foods and beverages
  - Antihistamines
  - Tricyclic antidepressants
  - Elmiron
  - Intravesical therapy: DMSO (dimethyl sulfoxide)

Differential Diagnosis: ***Gastrointestinal*** Conditions that may Cause or Exacerbate Chronic Pelvic Pain

Level A

- Colon Cancer
- Constipation
- Inflammatory Bowel Disease
- Irritable Bowel Syndrome

Level B

None

Level C

- Colitis
- Chronic Intermittent Bowel Obstruction
- Diverticular Disease

Irritable Bowel Syndrome (IBS)

- ***Description:*** Chronic relapsing pattern of abdominopelvic pain and bowel dysfunction with intermittent diarrhoea and constipation

- ***Prevalence***
  - Affects 12% of the Western population
  - 2:1 prevalence for women: men
  - Peak age of 30-40's
  - Rare in women over 50
  - Associated with elevated stress level

- ***Symptoms***
  - Diarrhoea, constipation, bloating, mucosy stools
  - Symptoms of IBS found in 50-80% women with CPP

Irritable Bowel Syndrome (IBS)

- ***Diagnosis based on Rome II criteria***
- ***Treatment***
  - Dietary changes
  - Decrease stress
  - Cognitive Psychotherapy
  - Medications
    - Antidiarrheals
    - Antispasmodics
    - Tricyclic Antidepressants
    - Serotonin receptor (3, 4) antagonists

Rome II Criteria for Irritable Bowel Syndrome

At least 12 weeks (need not be consecutive) in the preceding 12 months of abdominal discomfort or pain that has 2 of 3 features:

1. Relieved with defecation
2. Onset associated with a change in frequency of stool
3. Onset associated with a change in stool form or appearance

The following symptoms are not essential for the diagnosis, but their presence increases diagnostic confidence and may be used to identify subgroups of irritable bowel syndrome:

- Abnormal stool frequency (more than 3 per day or fewer than 3 per week)
- Abnormal stool form (lumpy, hard or loose, watery) in more than 25% of defecations
- Abnormal stool passage (straining, urgency, or feeling of incomplete evacuation) in more than 25% of defecations
- Passage of mucus in more than 25% of defecations
- Bloating or feeling of abdominal distention in more than 25% of days

Modified from Thompson WG, Longstreth GF, Drossman DA, Heaton KW, Irvine EJ, Muller-Lissner SA. Functional bowel disorders and functional abdominal pain. Gut 1999;45(Suppl 2):II43–7.

Differential Diagnosis: *Musculoskeletal* Conditions that may Cause or Exacerbate Chronic Pelvic Pain

Level A

- Abdominal Wall Myofascial Pain (Trigger Points)
- Chronic Back Pain
- Poor Posture
- Fibromyalgia
- Neuralgia of pelvic nerves
- Pelvic Floor Myalgia
- Peripartum Pelvic Pain Syndrome

Level B

- Herniated Disk
- Low Back Pain
- Neoplasia of spinal cord or sacral nerve

Level C

- Lumbar Spine Compression
- Degenerative Joint Disease
- Hernia
- Muscular Strains and Sprains
- Rectus Tendon Strains
- Spondylosis

Differential Diagnosis: *Psychological/Other* Conditions that may Cause or Exacerbate Chronic Pelvic Pain

Level A

- Abdominal cutaneous nerve entrapment in surgical scar
- Depression
- Somatization Disorder

Level B

- Celiac Disease
- Neurologic Dysfunction
- Porphyria
- Shingles
- Sleep Disturbances

Level C

- Abdominal Epilepsy
- Abdominal Migraines
- Bipolar Personality Disorder
- Familial Mediterranean Fever

Source: ACOG Practice Bulletin #51, March 2004

Psychological Associations

- 40 – 50% of women with CPP have a history of abuse (physical, verbal , sexual)
- Psychosomatic factors play a prominent role in CPP
- Psychotropic medications and various modes of psychotherapy appear to be helpful as both primary and adjunct therapy for treatment of CPP
- Approach patient in a gentle, non-judgmental manner
  - Do not want to imply that “pain is all in her head”

Adhesions and Pelvic pain

- Adhesions occur in 40% with CPP
- In 25% of cases no pathology identified
- Reduction or complete amelioration in pain in about 80% after adhesiolysis.

Peters et al (1992): Br J Obstet Gynaecol 99: 59-62.

diZerega G (1997): Eur. J. Surg suppl 577 :10-16

Consider the Bladder in Women With Unresolved CPP

61% have no obvious aetiology for CPP[1]

80% of women with CPP receive an initial diagnosis of endometriosis[2]

Up to 54% of women treated medically for endometriosis continue to experience CPP[3]

- 5% to 26% have reported continuing CPP ≥1 year after hysterectomy[4-9]

The bladder is believed to be the source of CPP in over 30% of female patients[10]

1. Mathias SD et al. *Obstet Gynecol*. 1996;87:321-327. 2. Carter JE. *J Am Assoc Gynecol Laparos*. 1994;2:43-47. 3. Dlugi AM et al. *Fertil Steril*. 1990;54:419-427. 4. Carlson KJ et al. *Obstet Gynecol*. 1994;83:556-565. 5. Kjerulff KH et al. *Obstet Gynecol*. 2000;95:319-326. 6. Kjerulff KH et al. *Am J Obstet Gynecol*. 2000;183:1440-1447. 7. Stovall TG et al. *Obstet Gynecol*. 1990;75:676-679. 8. Hillis SD et al. *Obstet Gynecol*. 1995;86:941-945. 9. Hartmann KE, et al. *Obstet Gynecol*. 2004;104:701-709. 10. Zondervan KT et al. *Br J Obstet Gynaecol*. 1999;106:1156-1161.

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Conclusions

- Chronic Pelvic Pain requires patience, understanding and collaboration from both patient and physician
- Obtaining a thorough history is key to accurate diagnosis and effective treatment
- Diagnosis is often multifactorial – may affect more than one pelvic organ
- Treatment options often multifactorial/ multidisclipinary – medical, surgical, physical therapy, cognitive

Thank YOU


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