**Dyspareunia**

Dyspareunia can be deep or superficial and is pain during or after sex in the vagina, clitoris or labia. It occurs most frequently in the young, with a history of abuse and peri- or post-menopausal. Tightening of the vaginal muscles on penetration is a symptom of vaginismus. This is often extremely painful and may make penetration physically impossible.

Take a full and thorough **history**

* Is it recent or has there always been dyspareunia?
* Has the dyspareunia followed childbirth? If so, is there a history of episiotomy or of traumatic birth?
* Where is the pain felt (superficial, deep or both)?
* When is the pain felt (before, during or after intercourse or a combination of these)?
* If pain continues after intercourse, how long does it last?
* Does anything else produce the same pain? (For example, pain from irritable bowel syndrome (IBS) may be experienced during periods of bowel activity.)
* Has successful intercourse taken place in the past?
* Is intercourse possible at present?
* If not, does the patient wish to be sexually active?
* Have artificial lubricants been tried?
* Is there anything to suggest there has been sexual abuse, rape or trauma to the genitals?
* Ask about symptoms suggestive of the menopause
* Is there an increased risk of a sexually transmitted infection (STI)
* Are there any symptoms of a pelvic prolapse.
* Are there symptoms of urinary tract infection (UTI)?
* Is she breast-feeding? This can lead to vaginal dryness and dyspareunia.
* Note comorbid medical history, particularly of bowel or bladder disease, abdominal surgery (which may lead to adhesions), prolapse surgery (leading to vaginal scarring) and of psychiatric conditions
* Medical conditions which can affect vaginal sensation include Sjögren's syndrome (which may cause vaginal dryness) and diabetes (which increases the tendency to thrush but which can also be associated with reduced vaginal lubrication).

**Examination**

* Perform an abdominal examination to detect any masses or suprapubic tenderness.
* Proceed to external genital examination. This may include sensitivity testing with a cotton-topped bud to detect provoked vulvodynia (previously called vulvar vestibulitis).
* Look for:
  + Skin disease, such as psoriasis or lichen sclerosus.
  + Whether vaginal secretions seem normal or sparse.
  + Inflammation, Bartholins abscess or cyst or infection
  + Scarring (surgical or due to delivery)

Vaginal examination may allow direct observation of vaginismus.

Bimanual examination of the pelvis is then indicated:

* Palpation of the bladder base bimanually usually produces mild urgency; however, in women with chronic interstitial cystitis, pain may then be reproduced.
* Cervical sensitivity
* Assessment of the size, shape, position and mobility of the uterus and adnexae may reveal tenderness, bulkiness or the pelvic scarring associated with endometriosis or adhesions. Abnormal pelvic masses, tenderness or lack of mobility of the pelvic organs, may suggest endometriosis.
* Tenderness on posterior palpation of the rectum is common with IBS.
* Rectovaginal examination is rarely necessary, has poor sensitivity and is unlikely to alter management

**Investigations**

* Swabs ,dipstick urine
* Investigation of the gastrointestinal or urinary tract will be based on history and examination.
* Laparoscopy may be useful if endometriosis or adhesions are suspected as the source of pain.

**Differential diagnosis**

Symptoms can give a good indication of cause:

Psychological dyspareunia, including that associated with lack of desire, or that associated with prior or ongoing sexual or domestic violence may cause any one or combination of these.

* Pain with arousal:
  + Hymenal ring bands cause pain during arousal.
  + Swelling of a [Bartholin's gland cyst](http://patient.info/doctor/bartholins-cyst-and-abscess-pro) during intercourse.
* Sensitive external genitalia:
  + [Vulvodynia](http://patient.info/doctor/vulvodynia-pro), which includes clitoral irritation and hypersensitivity.
  + Chronic [vulvitis](http://patient.info/doctor/vulvitis-pro) from infection, chemical irritation or allergy, including candida, herpes simplex, trichomonas, gardnerella.
  + Skin disorders, including [lichen planus](http://patient.info/doctor/lichen-planus-pro) and [lichen sclerosus](http://patient.info/doctor/lichen-sclerosus-pro).
* Pain at introitus with entry of penis:
  + Painful episiotomy scar or posterior skin bridge.
  + Surgery and radiotherapy for malignant disease.
  + Rigidity of the hymenal ring.
  + Inadequate lubrication, including psychological problems like:
    - Past or present abuse.
    - Anxiety and depression.
  + [Atrophic vaginitis](http://patient.info/doctor/atrophic-vaginitis) (genitourinary syndrome of menopause).
  + Problems of arousal (including insufficient foreplay, and medication).
  + Congenital abnormality of the vagina.
  + Vaginitis (from infection, chemical irritation or allergy, including from spermicides).
  + [Vaginismus](http://patient.info/doctor/vaginismus).
* Mid-vaginal pain:
  + Congenitally shortened vagina.
  + Acute or chronic [cystitis](http://patient.info/doctor/lower-urinary-tract-symptoms-in-women-pro), or [interstitial cystitis](http://patient.info/doctor/interstitial-cystitispainful-bladder-syndrome-pro).
  + Urethritis.
* Pain with orgasm:
  + Uterine contractions.
* Pain with deep penetration:
  + [PID](http://patient.info/doctor/pelvic-inflammatory-disease-pro).
  + Vaginitis.
  + Cervicitis.
  + Malposition of an intrauterine contraceptive device (IUCD) or intrauterine system (IUS) - sitting in the cervical canal.
  + [Endometriosis](http://patient.info/doctor/endometriosis-pro)/adenomyosis.
  + Enlarged uterus from myoma.
  + Fixed retroverted uterus.
  + Scarring from surgery for [genitourinary prolapse](http://patient.info/doctor/genitourinary-prolapse-pro).
  + Inadequate sexual arousal (as with pain at the introitus).
  + [IBS](http://patient.info/doctor/irritable-bowel-syndrome-pro).
  + [Inflammatory bowel disease (IBD)](http://patient.info/doctor/ulcerative-colitis-pro) or [chronic constipation](http://patient.info/doctor/constipation-in-adults-pro).
  + Pelvic mass.
  + [Interstitial cystitis](http://patient.info/doctor/interstitial-cystitispainful-bladder-syndrome-pro).
  + Retroverted uterus with prolapsed ovaries (into the pouch of Douglas).
* Pain after intercourse:
  + Vaginismus.
  + Vaginitis.
  + Cervicitis.
  + IUCD or IUS sitting in the cervical canal.
  + Endometriosis/adenomyosis.
  + IBS.
  + IBD.
  + Retroverted uterus with prolapsed ovaries (into the pouch of Douglas).

**Management**

As with erectile dysfunction, where appropriate, the problem should be approached by the couple rather than just the individual.

**General measures**

* Treatment should be directed at the underlying cause, where appropriate.
* Psychological treatments are as effective as medical treatments, independent of the cause of the pain.
* A multidisciplinary approach, which includes psychosexual medicine, physiotherapy, clinical psychology and pain management teams, may be required.
* Modification of sexual technique and altering position may help to reduce pain with intercourse. Increasing the amount of foreplay and delaying penetration until maximal arousal will increase vaginal lubrication and decrease pain with insertion.

**Pharmacological**

* Vaginal infection may need treatment.
* Hormonal manipulation may benefit endometriosis.
* Local injections of corticosteroids, local anaesthetic and hyaluronidase have been well tolerated with significant improvements in pain scores and sexual function for chronic localised pain following childbirth or vaginal surgery.
* Vaginal oestrogens are a safe and effective treatment for genitourinary syndrome of menopause.
* Testosterone may be helpful for some women with arousal problems.

**Surgical**

* Surgery is required for pelvic masses and sometimes to remove chronically infected tubes or to clear endometriosis or adhesions.
* Fenton's operation (to enlarge a tight introitus) may help.
* Removal of sensitive scar tissue bridge can be highly effective when there is pain following episiotomy.
* Ventrosuspension to 'correct' a retroverted uterus in an anteverted position is occasionally proposed but it is not known if it is effective as there are no randomised controlled trials of this procedure.