Management of the Patient with Vulvar Pain Syndromes

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Learning Objectives
At the conclusion of the symposium, the participants should be able to:
1. Develop a differential diagnosis for vulvar pain and counsel the patient
2. Prescribe the most effective medications for neuropathic pain
3. Identify patients with pelvic floor pain and refer to pelvic floor physical therapy
Disclosures and Conflicts of Interest

Haefner, MD is on the advisory board of Merck, Co. Inc.

Multiple medications used in vulvodynia treatment are “off-label”

Written Information Available
University of Michigan
Center for Vulvar Diseases

Then, click on Information on Vulvar Diseases
http://obgyn.med.umich.edu/patient-care/womens-health-library/vulvar-diseases

University of Michigan Center for Vulvar Diseases

There are many reasons for seeing a vulvar disease specialist. The University of Michigan Center for Vulvar Diseases, treating vulvar disease comprehensively, is the only part of the system to offer an integrated approach to vulvar disease treatment.

Our multidisciplinary approach at Michigan Medicine and U-M Women's Health Program provides state-of-the-art care options, from cutting-edge treatment options to education and counseling to meet every individual's needs.

The Center for Vulvar Diseases was created in 1993 to better serve and treat women with diseases of the external genitalia. Our center is one of only a handful of clinics that specialize in treating these conditions.

We focus on the multidisciplinary approach to help patients improve their health.

The team approach allows us to provide a higher intensity of care and expertise to women who have already demonstrated a resistant and chronic illness or an unusual vulvar condition.

Many women experience different forms of vulvar pain, including vulvodynia. Vulvodynia is pain on the surface of the vulva or upon intercourse with a normal appearing vulva. It is a burning, stinging irritation. Some patients are unable to accept sexual penetration due to muscle spasms and tenderness. Other conditions associated with vulvar pain include:

- Lichen sclerosis or lichen planus—chronic inflammatory skin disorders
- Vulvar intraepithelial neoplasia—precancerous condition, often associated with a virus, the human papilloma virus (HPV)
- Herpes simplex virus—disease of the aminals and vulva, with open sores and ulcers
- Bartholin cyst—fluid filled cysts at the base of the endocervix
Question 1

I see patients with vulvodynia

- Yes
- No
Question 2

I like to see patients with vulvodynia

- Yes
- No

Definition and Diagnosis
Theories on Etiologies
Treatments
Definition of Vulvodynia

International Society for the Study of Vulvovaginal Disease (ISSVD)

Chronic discomfort
Burning
Stinging
Irritation
Rawness

Vulvodynia

First appeared in the literature in the late 1861 in an article by J. Marion Sims, MD. He describes a patient he saw in 1857 with vaginismus, but upon further analysis of her history, she appears to have vulvodynia.
Hyperaesthesia of the Vulva

It consists of an excessive hypersensibility of the nerves supplying the mucous membrane of some portion of the vulva.


Hyperaesthesia of the Vulva

Characterized by a supersensitiveness of the vulva. When, however, the examining finger comes in contact with the hyperaesthetic part, the patient complains of pain, which is sometimes so great as to cause her to cry out.

Historical Perspective

1928  H.A. Kelly

Exquisitely sensitive deep-red spots in the mucosa of the hymeneal ring are a fruitful source of dyspareunia.


Historical Perspective

First patient to have vulvar pain
8.3% of women have vulvodynia


Various Terms Utilized for Vulvar Pain Prior to 2003

- Essential Vulvodynia
- Dysesthetic Vulvodynia
- Vulvar Vestibulitis Syndrome
- Vulvar Dysesthesia (Generalized or Localized)
- Provoked Vulvar Dysesthesia
- Spontaneous Vulvar Dysesthesia
Vulvar pain related to a specific disorder

- **Infectious** (e.g. candidiasis, herpes, etc.)
- **Inflammatory** (e.g. lichen planus, immunobullous disorders, etc.)
- **Neoplastic** (e.g. Paget’s disease, squamous cell carcinoma, etc.)
- **Neurologic** (e.g. herpes neuralgia, spinal nerve compression, etc.)
Diagnosis of Vulvodynia

Define disease
Q-tip test
Vulvoscopy?
Duration of pain

Generalized
Conditions to Rule Out

Yeast (often cyclic vulvar pain)
Desquamative inflammatory vaginitis (DIV)
Atrophic vaginitis
Pudendal nerve entrapment
Sacral nerve root Schwannoma (vulvococcygodynia)
Candidiasis

Desquamative Inflammatory Vaginitis
Atrophic Vaginitis

Pudendal nerve

Sacrospinous ligament

Pudendal Nerve Entrapment

Pudendal nerve

Sacrospinous ligament
Definition and Diagnosis

Theories on Etiologies

Treatments

Embryologic derivation
HPV
Oxalates
Hormonal changes

Chronic inflammation
Altered neuro-inflammation process
Nerve pathways
Patient with vestibulodynia
Nerve fiber proliferation

Control
Few nerve fibers

S-100 Immunostain

Question 3

The nerve which supplies the major portion of the vulva is the
1. Ileoinguinal nerve
2. Genitofemoral nerve
3. Perineal nerve
4. Pudendal nerve
Pudendal Nerve

Originates from S2, S3, and S4 foramina

Proposed neuroimmunological mechanism of the allodynia/hyperpathia of vulvodynia

Increased proinflammatory cytokines: IL-1, IL-6, IL-8 IFN-α TNF-α

Nerve growth factor increased
Mast cell accumulation

Allodynia and hyperpathia

Potentially inciting factors:
- Infections
- Irritants
- Toxins
- Medications
- Other

IL-1ra
IL-4
IL-12 and IL-18

Legend:
= stimulatory
= inhibitory

Substance P
CGRP
Definition and Diagnosis
Theories on Etiologies
Treatments

Evaluating Vulvodynia Patients
A Team Approach
SEXUALITY AND PAIN

Tender, or patient describes area touched as area of burning

Yeast culture negative or inadequate relief with antifungal rx

1. Vulvar care measures
2. Topical medications
3. Oral medications
4. Injections
5. Biofeedback/Physical therapy
6. Low oxalate diet
   Ca^{2+} citrate supplementation?
7. Cognitive and behavioral therapy
Vulvar Care Measures

No soap on the vulva

Shower heads for rinsing and…
Menstrual Pads That Are Not Recommended

White flannel wipes
Cool Gel Packs

Vaginal Lubricants
Replens
Astroglide
KY Liquid
Probe
Slippery stuff
Jo
... etc.
Position Changes

Topical Anesthetics

5% Lidocaine (Xylocaine®) ointment safe, effective short-term symptom relief for vestibulodynia (pre-intercourse)

Benzocaine (Vagisil®) not recommended; it is a sensitizing agent, causing rebound vasodilation and pain
Topical Antidepressants

- Doxepin (Zonalon®)
- Topical amitriptyline 2% with Baclofen 2% in WWB (water washable base) - squirt ½ cc from syringe onto finger and apply to affected area

Dispense 30 day supply

Topical Gabapentin

Boardman et al. 2008

Topical gabapentin – 80% of evaluable patients had > decrease in pain after 8 weeks of 2-6% gabapentin (one report)
Oral Medications

Tricyclic Antidepressants

• Useful for neuropathic pain syndromes such as postherpetic neuralgia and vulvar dysesthesia
• Doses for pain management less than for depression
  - Tricyclics
  - SSRI’s
  - SSNRI’s (venlafaxine, duloxetine)
Tricyclic Antidepressants

Amitriptyline or desipramine
- Advise regarding rationale
- Start at low dose two hours before bedtime and increase up to 150, until comfortable, or intolerable side effects
- One drink of ETOH per day
- Advise slow benefit

Tricyclic Medications

Adverse effects
- Drowsy (amitrip > desip) or
- Jittery (desip > amitrip), tachycardia
- Dry mouth, eyes
- Increased appetite
- Constipation
Other Antidepressants

Venlafaxine (Effexor)
Duloxetine (Cymbalta)

Anticonvulsants and Pain Control

The role of anticonvulsant drugs in the treatment of neuropathic pain is evolving and has been clearly demonstrated

- Gabapentin - Tiagabene
- Pregabalin - Lamotrigine
- Topiramate
Gabapentin

64% of 152 generalized vulvodynia patients improved by 80% in a retrospective chart review


Pregabalin

Retrospective chart review of 28 women on pregabalin for vulvodynia.

- 12 reported improvement averaging 62%
- 10 discontinued due to AEs
- 4 had no improvement
- 2 with vestibulodynia had not tested their pain

Aranda J, Edwards L: presented at the 2007 ISSVD World Congress
Anticonvulsants and Pain Control

The role of anticonvulsant drugs in the treatment of neuropathic pain is evolving and has been clearly demonstrated:

- Gabapentin
- Pregabalin
- Topiramate
- Tiagabene
- Lamotrigine

Topiramate - anticonvulsant used for pain
Specific Point Tenderness

- Bupivacaine / triamcinolone acetonide injections
  - Bupivacaine (0.25% or 0.5%) and triamcinolone acetonide (Kenalog®)
  - Draw up triamcinolone acetonide (Kenalog®) first (40 mg/cc) (can use up to 40 mg steroid in single dose per month). CAUTION ON PERINEUM AND SMALL AREAS. Combine with Bupivacaine (large area use 0.25%; small area use 0.5%) Inject into specific area or use as a pudendal block
  - Can be repeated monthly
  - 50% efficacy

Nerve Blocks

Pudendal
Genitofemoral
Ilioinguinal
Ganglion impar
Pudendal Nerve Blocks

Originates from S2, S3, and S4 foramina

Genitofemoral and Ileoinguinal Nerve Blocks
Genitofemoral and Ileoinguinal Nerve Blocks

Ganglion Impar Block
Pelvic Floor Pain
Physical Therapy
www.apta.org

Palpate levator ani and bulbocavernosus

Treatments for Vaginismus

Counseling
Topical lidocaine
Topical baclofen
Physical therapy
Dilators
Hypnosis
Treatments for Vaginismus

Counseling
Topical lidocaine
Topical baclofen
Physical therapy
Dilators
Hypnosis

Surgical Treatments
Surgery
Neogyn Skin Cream

20 -30% reduction in pain and erythema with Neogyn use

Women with secondary PVD had a 30-50% reduction in pain and erythema

Novel Therapeutic Approaches

Chemodenervation

Over 700 reports of botulinum toxin for pain
Minimizes vaginismus-relaxes levator ani muscles


Chemodenervation
Bulbocavernosus
Neuromodulation with Sacral Nerve Stimulator

Modulation of efferent signals to spinal cord
Refractory pain in distribution of specific nerve root (S3 or S4)

58th Annual T. Hart Baker, MD
OB/GYN Symposium


Acupuncture Today 2001;2:1,16.

Hypnosis
www.asch.net

Report on hypnosis for vestibulodynia
Experimental Treatments Not Widely Used

- Leukotriene receptor antagonist
- Topical nitroglycerin
- Topical capsaicin
- Enoxaparin injections
- KTP and YAG laser rx
- Motor cortex stimulation (central)

THE VULVODYNIA GUIDELINE
6-18-03
ASCCP Program Section
Vulvar Conditions

- Develop a guideline with vulvar disease experts for managing a particular vulvar condition
“You picked the most complicated of topics, where there are probably differences of opinion.”

Raymond H. Kaufman, MD

“Are you nuts?”

Raymond H. Kaufman, MD
The Vulvodynia Guideline


- A guideline for treating vulvodynia is described

www.jlgtd.com
- click on archive
- click on Volume 9 (2005)
- Jan 2005 (pp 1-63)
- Scroll down to The Vulvodynia Guideline
- Click on PDF (350 K)

Vulvodynia Awareness Campaign
Office of Research on Women’s Health

http://orwh.od.nih.gov/health/vulvodynia.html
General Measures

Written material/handouts
Patient education regarding the nature and prognosis of vulvodynia
National Vulvodynia Association
www.nva.org or 301-299-0775

Online teaching program on chronic vulvar pain
http://learn.nva.org

Oceans of Lotions, Potions, and Notions
No “One Simple Cure”

The Human Dimension