

UAMS



COLLEGE OF MEDICINE
DEPARTMENT OF
OBSTETRICS AND GYNECOLOGY

UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES



**The University of Arkansas for Medical
Sciences
Center for Vulvar Disorders**

University Women's Health Center
Freeway Medical Tower
5800 W 10th St
Little Rock, AR 72204
ANGELS Call Center:
866-273-3835 or 501-526-7425

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CLINIC INFORMATION

The University of Arkansas for Medical Sciences Center for Vulvar Disorders was founded in 2009 as a consultation and referral center for complex vulvar problems. The Center for Vulvar Disorders provides a comprehensive set of services to each individual. Members of our multidisciplinary staff attend each patient during a visit. The team approach has been created as the basic structure in recognition of the necessity to provide this intensity of care and expertise to patients who have already demonstrated that they are afflicted by a resistant and chronic illness, or an unusual vulvar condition.

The following people are actively involved in your care at the Center for Vulvar Disorders:

David A Hutchins, M.D. Co-Director

Dr. Hutchins is an Assistant Professor in the Department of Obstetrics and Gynecology. Dr. Hutchins is board-certified in obstetrics and gynecology with over 35 years of experience. He is a member of the International Society for the Study of Vulvovaginal Diseases (ISSVD). Dr. Hutchins is active in vulvar disorder research. He offers skilled, perceptive support and detailed instruction to his patients.

Amy Phillips, M.D. Co-Director

Dr. Phillips is an Assistant Professor in the Department of Obstetrics and Gynecology. She graduated summa cum laude from the University of Arkansas for Medical Sciences in 2004, then completed her residency at UAMS in 2008. Dr. Phillips looks forward to many years of excellence in practicing medicine, teaching and research for UAMS.

Joseph A. Banken, PhD

Dr. Banken is an Associate Professor, the Director of Behavioral Health, and the Director of Research for the Department of Obstetrics and Gynecology. He is a licensed psychologist, a member of the American Psychological Association, and has been registered by the prestigious National Register of Health Providers since 1991. He holds a unique position as the only psychologist with a primary appointment to the Department of Obstetrics and Gynecology. Dr. Banken's practice focuses on women's needs in Behavioral Health.

W. C. "Chuck" Hitt, MD

Dr. Hitt is an Assistant Professor in the Department of Obstetrics and Gynecology. He is the Director of the General OB/GYN Division and the Practice Director of the University Women's Health Center. Dr. Hitt entered private practice in 1993 and returned to UAMS in 2007 to teach, mentor and pursue his primary research interest in telehealth while maintaining a vigorous schedule of caring for patients.

Jon Etienne Mourot, PhD, JD

Dr. Mourot is a licensed psychologist specializing in sex therapy with individuals and couples. He maintains a private practice in Little Rock and has generously set aside time to help women in the Center for Vulvar Disorders at UAMS. Dr. Mourot attained his doctorate in Counseling Psychology from the University of Miami. He was certified as a sex therapist in 2003. He is a member of the American Association of Sexuality Educators, Counselors, and Therapists; Arkansas Psychology Association and the World Professional Association for Transgender Health.

Curtis Lowery, MD

Dr. Lowery is the Chairperson of the Department of Obstetrics and Gynecology, and has served as Director of Obstetrics since 1992. He is a Maternal Fetal Medicine specialist and has been instrumental in bringing telemedicine to rural areas of Arkansas in founding the UAMS Center for Distance Health which won the Hugo Gernsback Award for Clinical Innovation in Telemedicine. He established the award winning ANGELS program to assist at-risk pregnancies. The ANGELS program won the 2007 Educational Innovation Award and was announced by the Harvard University Ash Institute as one of the nation's most innovative governmental collaborations.

Donna Pellowski, MD

Dr. Pellowski is an Assistant Professor in the Department of Dermatology and Internal Medicine and has been staff physician since 2003. She received her medical degree from The Medical College of Wisconsin, completed her residency in Internal Medicine at the University of Colorado in Denver, and completed another residency in dermatology at the University of Iowa where she was Chief Resident. Her clinical interests are autoimmune diseases of the skin and vulvar diseases involving the skin.

Soheila Korourian, MD

Dr. Korourian is an Associate Professor in the Department of Pathology and the Director of Breast Pathology and Co-director of Gynecologic Pathology at UAMS. She received her medical degree from the University of Vienna in Austria. She completed her combined anatomic/ clinical pathology at University of Colorado for Health Sciences Center in Denver, Colorado. She completed a surgical pathology fellowship at Stanford University. She is board certified in anatomic/ clinical pathology and cytopathology. She has been an active member of International Gynecologic pathology since 1992, and has practiced pathology for almost 20 years.

Mitzi Gibson, MSPT

Ms. Gibson received her Master of Science Degree in Physical Therapy from the University of Central Arkansas in 1995. She continued her education with post-graduate training in the area of Women's Health. A former National Director of Women's Health for the HealthSouth Corporation and a former national instructor in the area of Women's Health, Ms. Gibson is now in private practice in Little Rock. She has generously offered her time for the Center for Vulvar Disorders. Ms. Gibson specializes in women's health physical therapy including pelvic floor dysfunction.

Lori Mize, DPT

Mrs. Mize received her doctorate of physical therapy in 2004 from the University of Central Arkansas. She continued her education with post-graduate training in the area of women's health. Women's health physical therapy became her passion after a personal experience with low back pain during pregnancy. She developed a Women's Health program in North Central Arkansas and is now in practice at Advanced Physical Therapy of Little Rock where she specializes in women's health, pelvic floor and orthopaedic treatment. She has been a long time member of the APTA and is currently pursuing a clinical specialty in women's health. Mrs. Mize has generously offered her time for the Center for Vulvar Disorders.

Resident Physicians

The University of Arkansas for Medical Sciences is a teaching institution where **resident physicians** are an important part of patient care. Senior residents will be participating in your evaluation and treatment.

Telephone Communications

The staff recognizes the importance of open lines of communication with our patients. However, health care and the decisions relevant to each patient's health problems cannot effectively be carried out over the telephone. Several circumstances exist in which phone calls to the Clinic regarding health care issues are important: (1) to request an earlier appointment than scheduled because of a change in vulvar condition, (2) to obtain advice regarding the development of side effects from treatment, or (3) to provide information that was requested by your provider at your last visit.

All clinical calls are documented and processed by a registered nurse through the 24 hour ANGELS Call Center. The nurse will take one of the following courses of action: (1) provide you with care advice, or (2) consult with the health care provider as soon as possible and arrange further communication with you, or (3) put you in touch with the appointment center to schedule an earlier or urgent visit for you at the Clinic.

The call center phone number is (866) 273-3835 or (501) 526-7425. The call center nurse phone lines are open 24 hours a day; the appointment lines are open from 8:00 AM to 4:30 PM Monday through Friday. Because of the volume of calls that reach the clinic daily, we request that your calls

be kept brief. A useful suggestion is to outline your problem before calling and know your medications and dosages and pharmacy fax or phone number, if your call involves these. In your best interest, complex clinical dilemmas must be evaluated in person.

Reporting Progress

Under special circumstances, you may be asked to report progress between visits. This is not in place of regular follow-up evaluations. If you feel your condition has worsened and you require modification of your therapy, it is appropriate to call the clinic and set up an earlier return visit. At times, you will be asked to contact us in one month to report your progress and alter medications. It is very important to call when indicated.

Follow-up Visits

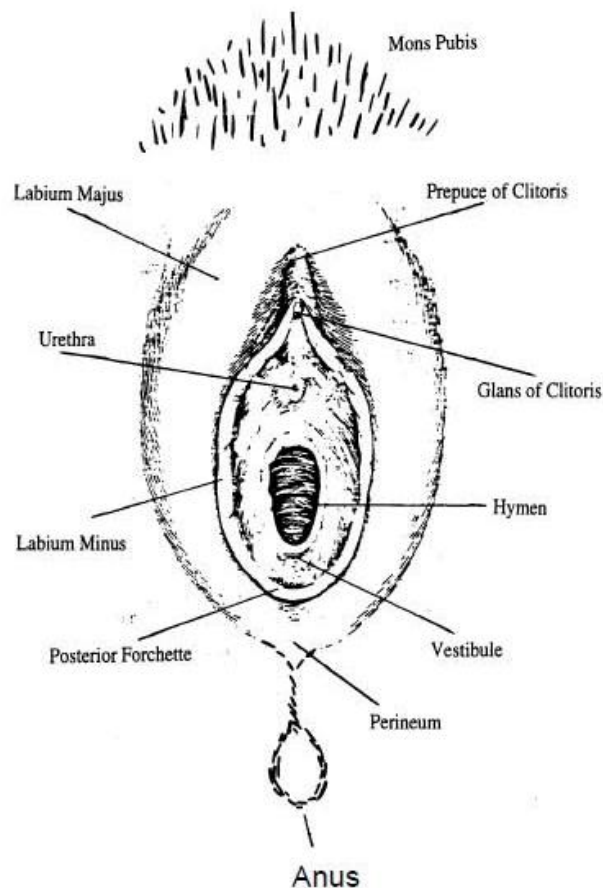
Your provider will determine whether a return visit to the Center for Vulvar Diseases is necessary. All referring care providers will receive a detailed letter about your visit. In certain circumstances, follow-up visits and medication management will be handled by your referring care provider.

Refills of Prescriptions

Prescriptions are carefully calculated so that your medication will last until your next appointment at the University of Arkansas for Medical Sciences Center for Vulvar Disorders or with your primary care provider. In the event that you need medication prior to your next return visit, it is essential that you communicate with the appropriate service regarding this matter prior to running out of your medication.

The Vulvar Self-Exam

Just as you would examine your breasts or skin for changes, you should examine your vulva. Many diseases of the vulva have similar symptoms. The vulvar self-exam will help you to be aware of any changes in the vulvar area that may need ongoing evaluation. Some changes in the vulva may mean cancer. Tell your health care provider if you see any changes or have symptoms that don't go away, such as itching, bleeding or discomfort. If a problem does occur, catching it at an early stage--when treatment is most successful--is in your best interest. Learning how to do a vulvar self-exam can best accomplish this.



1. Wash your hands carefully before you begin. Lie or sit up in a comfortable position with good lighting and a hand mirror (a magnifying mirror may work best). It may help to prop up your back with pillows, or you can squat or kneel. Finding a comfortable position is important so you can clearly see the vulvar

area, perineum, and anus. First, just look and learn. Things may appear different from what you expect, and that does not necessarily mean they are abnormal.

2. Gently separate the outer lips of the vulva. Look for any redness, swelling, dark or light spots, blisters, bumps or other unusual colors.
3. Next, separate the inner lips and look carefully at the area between them for the same changes. Also, look at the entrance of the vagina.
4. Gently pull back the skin covering the clitoris and examine the area under the hood at the tip of the clitoris.
5. Be sure also to inspect the area around the urethra, the perineum, the anus, the outside of the labia majora and the mons pubis.

SOME SUGGESTED VULVAR PAIN & ITCHING MEASURES

The vulva is the external genitalia in the female. The skin of the vulva can be quite sensitive. Because it is moist and frequently subjected to friction while sitting and moving, this area can be easily injured. There are various strategies that can be used to prevent irritation and allow the vulva to heal. Keeping this area dry can accelerate healing. Chemicals found in toilet tissues, laundry soaps and detergents that come in contact with the vulva can cause irritation. Avoiding contact with potential irritants that contain chemicals is important. Fabric softeners in undergarments, chemicals in deodorant soaps, bubble baths, feminine hygiene spray and panty liners etc., can all cause irritation to the vulva. The following recommendations are specific measures that can help minimize vulvar irritation.

Wear white 100% cotton underwear and do not wear underwear at night. Do not wear pantyhose, tights, or other close-fitting clothes. Enclosing this area with synthetic fibers holds both heat and moisture in the skin, conditions which potentiate the development of infections. Tight-fitting clothes may also increase your symptoms of discomfort.

After washing underwear, put it through at least one whole cycle with water only. Some women have suffered needlessly from irritants in detergents whose residue was left in clothes by incomplete rinsing. Rinsing clothes thoroughly is more important than which detergent is used although to be on the safe side, the milder the soap, the better. Wash new underwear before wearing. Fabric softeners and dryer sheets should not be used.

Rinse skin off with plain water frequently. Use tap water, distilled water, sitz baths, squirt bottles, or bidets. Additionally, hand held showers can be helpful for rinsing the vulva. After rinsing, pat the skin gently dry.

If the anus is irritated, consider cutting white flannel squares and placing the square in warm water. Wipe the anus with the wet flannel and discard or wash the flannel.

Use very mild soap for bathing. It is best not to use any soaps on the vulva. The vulva should be rinsed with warm water. Bars of soap such as Neutrogena unscented face soap, Basis, Pears (made in England), and castile soap with olive oil (Conti) are gentle to the other skin areas. They are found at pharmacies or health food stores. Remember that frequent baths with soaps may increase the irritation. You cannot wash away your symptoms.

A compress of oiled Aveeno (a powdered oatmeal bath treatment) has been recommended by some. It is placed over the vulva three to four times a day. Put two tablespoons of Aveeno in one quart of water. Mix in a jar and refrigerate. This is often helpful after intercourse or when symptoms of burning and itching are present.

Some patients find the use of cool gel packs on the vulva to be helpful. We do not recommend products with benzocaine. This may numb the area, but also numbs our body's natural protection- the ability to feel the pain of a new injury. This may lead to further injury and infection.

Consider using 100% cotton menstrual pads and tampons. Many women with vulvar pain experience a significant increase in irritation and pain every month when they use commercial paper pads or tampons. This monthly increase in pain can often be reduced by using 100% washable and reusable cotton menstrual pads. Pure cotton tampons are available.

Don't sit or remain in a wet bathing suit for prolonged periods.

Avoid condom and spermicidal creams or gels if they cause increased irritation of sensitive tissues.

The use of lubricants may help with dryness, chafing, and sexual activity. More about the different types of lubricants can be found in the Sexuality and Pain section of this booklet.

Additionally, it is often recommended that the vulva is left uncovered at night (i.e. no underwear) to allow adequate exposure to the air.

Many of the disease processes will require a biopsy to diagnose your condition. If a biopsy is performed during your visit, after care is important. Keep the area clean and dry. Avoid application of creams or ointments to the biopsy site. Sitz baths twice a day for three or four days following the biopsy will aid in healing. If increased redness, severe pain, heavy discharge, or heavy bleeding occurs at the biopsy site, call for further instructions. Avoid intercourse until the biopsy site is healed.

Adapted From:

*The Vulvar Pain Foundation, "Natural and Prophylactic Measures Suggested", Vulvar Pain Newsletter 1993: Spring: 5-6
The Interstitial Cystitis Association Vulvar Pain handout*

VULVAR PAIN

A large proportion of the patients seen at the Center for Vulvar Disorders have vulvar pain. The following information is a comprehensive review of the different aspects of vulvar pain.

Definition: Throughout history many different terms have been used to describe vulvar pain. Vestibulodynia (previously called vulvar vestibulitis) consists of pain at the entranceway to the vagina. Vulvodynia (previously called dysesthetic vulvodynia) consists of a burning or pain on the vulva present in areas outside of the vestibule. Patients with vulvodynia may also have burning or pain at the vestibule. Symptoms consist of burning, stinging, irritation or rawness. Other terms used to describe the vulvar discomfort include stretching and throbbing.

Causes: Vulvar pain can be divided into two major categories: those with a known cause and those where a cause cannot be identified.

Pain with a known cause:

Vulvar pain can be associated with simple chemical irritation, so-called contact dermatitis. Common irritants include soaps, shampoos, scented toilet paper, douches, fabric softeners and scented menstrual pads. It can also be caused by certain medications which have been used to treat vulvar problems. Various infections can also be causes of vulvodynia. Women with chronic vulvar and vaginal yeast infection can frequently have vulvar itching and burning. Often symptoms worsen before menses as the changes in ovarian hormone production and the local vaginal environment can favor yeast growth during that time. Recurrent herpes simplex virus infection can also cause vulvar pain. These infections wax and wane, often starting at stressful times and lasting anywhere from a couple of days to a week or more. Irritation of the nerves which supply the vulva can also cause vulvar pain. This type of vulvar pain may radiate from the vulva to the perineum and into the groin and thigh. Some patients have lower back problems which may be associated with this pain also. Vulvar pain also results from injury (i.e. childbirth, vaginal/vulvar trauma).

Pain without a known cause:

Physical examination of this group of patients does not demonstrate any visible abnormalities. It is important to understand that vulvar pain with a normal appearing vulva does not mean that there is not a cause of the vulvar discomfort, rather a cause cannot be identified. Despite the fact that a cause of vulvar pain cannot be established in all cases, two things are important to keep in mind: 1) frequently the discomfort associated with vulvar pain can be controlled, and 2) it is clear that there is generally no relationship between vulvar pain and the subsequent development of vulvar cancer.

Pain on the Vestibule of the Vulva:

Some women present with distinct tenderness and at times erythema (redness) on the vestibule. Intercourse is painful and, in some cases, impossible due to the severe pain. Typically, women with pain on the vulvar vestibule present with a varying duration of symptoms from months to several years. Symptoms often begin after experiencing some type of infection or trauma followed by difficulty with intercourse. Burning, stinging, irritation or rawness at the vaginal opening with intercourse are the most common complaints. This same sensation may also be experienced when placing tampons or touching in the area of the vestibule. Women with

severe symptoms may also feel this same sensation when riding a bicycle, horseback riding or jogging. In more extensive cases, some patients experience these symptoms while sitting, walking or even without any movement. Typically, these women have seen a number of health care practitioners and have had numerous attempts at therapy with topical or oral antifungals, topical steroids, and antibiotics. Often, these provide no long term relief. The cause(s) of pain on the vestibule is not known. Early studies implicated the human papilloma virus as a cause, but this is no longer considered to be associated with vestibulodynia. There appears to be a small subset of women who have chronic yeast infection as a cause of their vestibular pain, and long-term yeast suppression has met with promising results in these women. There is also another group of women who appear to have both pain at the vulvar vestibule and interstitial cystitis (a condition of the bladder which causes urinary frequency and burning). Because the vestibule and a portion of the bladder are two tissues in the body derived from the same embryologic tissue, investigators have begun to look for an irritant which might affect both of these structures. To date, no one causative agent has been proven. Some patients relate the onset of their pain to a gynecological or obstetric event. It is important to recognize that there is absolutely no evidence that vestibular pain is a sexually transmitted disease, therefore, it cannot be contracted from or given to your sexual partner.

Treatment:

Treatment of vulvar pain conditions is confounded by the fact that the cause is unknown in a great majority of cases, and the best treatment will likely come only when the cause has been identified. Where chronic yeast infection can be identified, suppression of yeast growth can be gratifying. Other topical therapies such as steroids and antibiotics have not met with success. Topical anesthetic agents (e.g., viscous or liquid Xylocaine® [lidocaine]) can sometimes help with temporary relief. Great success in treating vulvar pain conditions comes from using a group of medications called antidepressants. This group of drugs (e.g., Elavil® [amitriptyline], Pamelor® [nortriptyline], Norpramin® [desipramine]) has been used to treat many chronic pain conditions where a cause cannot be found. The TCA (tricyclic antidepressant) may work by inhibiting certain pain fibers which supply (innervate) the vulva. This in turn can prevent these specific nerves from transmitting the message to the brain where it is processed and pain is perceived. Other antidepressants may also be used for pain control. Another group of drugs, anticonvulsants, are used as treatment for other

chronic pain conditions and may be used for vulvar pain. The use of the CO2 laser has not been successful, and in some cases, the results of treating vulvar pain with the CO2 laser have worsened the pain.

It has been suggested burning on the vestibule may be associated with elevated levels of oxalates in the urine. A group of investigators have described patients whose symptoms improve while on a low oxalate diet combined with taking a mineral called calcium citrate. Calcium citrate may decrease calcium oxalate formation in the urine, which is proposed to cause vulvar pain. (See page 21) Surgical excision of the vulvar vestibule may be offered as treatment for pain on the vestibule if conservative measures have failed.

There is no standard treatment for patients with vulvar pain since there are likely multiple causes. Treatments suggested will depend on your individual case. Modifications of treatments and medication dosages may need to be altered if your symptoms vary. The health care providers at the Center for Vulvar Diseases will discuss your individual case with you and develop an individual treatment plan based on your history, prior treatments and severity of symptoms.

Vulvar pain can be a difficult process to treat. Improvement may take weeks to months (even years) of long-term treatment. Spontaneous remission of symptoms has occurred in some women, while with others multiple attempts with medical management has proven unsuccessful in relieving 100% of symptoms.

For additional information on vulvodynia, an article is available on the internet: Haefner HK, Collins ME, Davis GD et al. The Vulvodynia Guideline. Journal of Lower Genital Tract Disease. 2005;9:40-51.

go to www.jlgttd.com

Click on Archive, Click on Jan 2005

Scroll down to the Vulvodynia Guideline Click on PDF (350)

IMPORTANT THINGS TO REMEMBER ABOUT VULVAR PAIN

- Vulvar pain is not generally associated with malignancy
- Despite the fact that the cause of vulvar pain cannot be established in many cases, careful investigation has established that it is not a sexually transmitted disease and is not contagious to your partner.
- Vulvar pain is not due to poor hygiene, and the use of strong soaps and detergents can worsen the condition. Use gentle soaps to the skin and no soap on the vulva, allowing water alone to cleanse the perineum.
- Improvement often takes weeks to months.
- Although the cause of vulvar pain cannot always be determined, it has been characterized well enough to allow treatment of the pain with a reasonable expectation of significant improvement, if not complete alleviation of pain.
- Treatment setbacks may occur; they are not necessarily the fault of your health care provider or you.
- We understand that chronic pain is exhausting and can be demoralizing.
- There is nothing wrong with you as a person, the problem is your pain.
- Don't feel that because this is genital pain that you can't talk to other people. People with chronic problems need others for support. Family and friends can help.
- If you are in a relationship, both of you are affected by this problem. Appropriate couple counseling may be needed.
- It is OK to seek information on your own. The more you know about this disease, the more control you have over your situation.
- Sometimes patients become depressed if new treatments fail. Remember this as we work through this problem.

Physical Therapy and Biofeedback

Physical Therapy and Biofeedback

Physical therapy (PT) and biofeedback are important in the treatment of vulvar pain. Our pelvic floor program has had much success in treating multiple pelvic floor dysfunctions.

Evaluation and treatment may include observation, palpation, use of topical vaginal or rectal sensors for biofeedback and / or electrical stimulation, vaginal probes for biofeedback, soft tissue mobilization, education, relaxation exercises, and ultrasound. Each physical therapy program is very individualized according to findings from the patient's initial evaluation and according to the patient's goals.

Various pain conditions can be aggravated or caused by muscle tension. When a person experiences pain, the body's natural response is to protect that body part by tightening the muscle. PT uses biofeedback to help educate patients on how to relax a contracted or tightened muscle.

Biofeedback gives you immediate information on whether your pelvic floor musculature is relaxed or tensed and helps you to gain voluntary control of your muscles. It aids in developing self-regulation strategies for confronting and reducing pain. This allows you to become actively involved in your own treatment and learn how to relax the pelvic floor muscles in various positions. Sensitive detectors can be used on the vulva to tell you what is happening in your vulvar nerve environment. With the aid of an electronic measurement and amplification system or biofeedback machine, an individual can view a display of numbers on a meter, or colored lights to assess nerve and muscle tension. In this way it is possible to develop voluntary control over those biological systems involved in pain and discomfort.

The body has a protective muscle guarding mechanism to protect painful areas. The muscles react by tightening up. Patients are taught to isolate their pelvic floor muscles and learn how to strengthen them. After exercise therapy, the muscles return to a stronger, more relaxed and more stable state.

A health care provider's referral or prescription is necessary for evaluation and treatment in physical therapy. Pre-certification from your primary care health care provider may also be required. It is recommended that you contact your insurance company prior to scheduling your initial physical therapy visit to assure physical therapy is covered by your insurance program.

SEXUALITY AND PAIN—A real challenge.

There are some conditions which can cause women to experience pain with sex, whether the activity is heterosexual (male/female) intercourse, lesbian (female/female) intercourse, masturbation, partner attempting to penetrate the vagina with fingers, or other sexually stimulating activity.

Many times numerous treatments have been tried, with little success. The pattern of experiencing pain with sex, sometimes for a long period of time, can be very challenging for women and for their partners.

Sometimes the pain comes and goes, but the fact that the women cannot predict when they may or may not experience pain means that they are always vigilant that pain could happen. This can set up a cycle of women and partners anticipating pain, which, in itself, is distracting.

The sexual response cycle is generally separated into three categories. These are the **desire phase, the excitement phase, and the orgasm phase**. Seeing sexual response in phases can be helpful, because women can begin to understand where their problem is occurring. This can be beneficial, if only to help women and their partners understand the impact of attempting to maintain a healthy sex life while coping with chronic pain.

The **desire phase** refers to a woman's interest in engaging in sexually arousing activity. We know that how a woman feels about herself and her body, what she expects from sexual experience in general and her partner in specific, and her experience with intimate relationships, whether sexual or not, all come together to influence sexual desire. Chronic pain can be a secondary cause of low sexual desire. For example, in the Center for Vulvar Diseases, women frequently tell us that the quality of their sexual interest and desire before they had pain was just fine. In other cases, some women state that they have always had some difficulty with sexual interest. This can vary from feeling they aren't nearly as interested in sex as their partners, to feeling that they would like to avoid sex forever if it was

possible. In cases where sexual desire has always been problematic, this issue should be addressed. If this issue isn't dealt with, for some women, resolving pain could mean that there is no longer an acceptable reason to avoid sexual contact. We hesitate to include this as an example about what can happen, because many women have been told that their vulvar pain is not real, and we know that the pain is real. We can't leave this factor out of a discussion about sexual desire.

The **excitement phase** describes what is happening in a woman's body during sexually stimulating activity. She usually feels focused on the activity. Her vagina becomes moist with lubrication, and her genital region feels "full" because of blood flow into the area. This is similar to a man having an erection during sexual arousal. Pain is not supposed to be a part of sexual arousal, and so when it occurs we call it an excitement phase difficulty. This refers more or less to the "mechanics" of sexual functioning. By itself a pain problem means only that something isn't functioning as it should. It is a symptom, and does not tell us anything about the woman's desire to be sexual or to experience sexual attraction. Of course pain with sex is a catch 22 for women, and their sexual partners. Anticipating that sex might hurt can certainly affect sexual desire.

The **orgasm phase** is the discharge phase. Some women have orgasms regularly with sexual intercourse, and some women do not. It is normal not to have an orgasm with every act of intercourse. If a woman can have an orgasm in some manner, during sexual activity with a partner or through masturbation, the orgasm phase is intact. Vulvar or vaginal pain does not in itself lead to difficulties with orgasm. However, pleasure can be substantially blunted if pain or anxiety about pain is a part of the sexual experience. Distraction because of pain or fear of pain can also affect whether or not a woman is orgasmic.

HELPFUL STRATEGIES TO DEAL WITH PAIN AND SEX

1. **Establish a working alliance with a health care provider.** This should include a working relationship with a provider or team who validates the pain you are experiencing. Of course this does not mean false reassurance on the part of the team to you, or blind faith on your part that this provider will completely eradicate pain you have had. This alliance should include:

- A. Medical evaluation and treatment recommendations. Your part will be to provide clear background information and medical records.
- B. An acknowledgment of the pain you are experiencing. The clinician will understand that you have pain, and that pain is interfering with your sexual pleasure and sense of well being. You will understand that even pain that is 100% physical in origin will have some psychological effects, because sexuality is a part of primary identity, and when you repeatedly experience pain with sex that identity is also injured.
- C. The provider or team can help “normalize” the experience of frustration you may be having. This can help with a feeling of isolation. Couples dealing with painful sex often feel they are quite alone in the experience.
- D. Honest exchange and communication are essential to your care.

2. Expand your sexual repertoire.

- A. Focus on **sensual as well as sexual**. When sex begins to be associated with pain, the experience of sensual pleasure can be lost as well. Sensuality can be re-introduced with “non-demand” massage, cradling, backrubs or other activities. Some couples become touch avoidant when they have experienced the cycle of pain.
- B. **Avoid sex that hurts**. This may seem obvious, but we have found conversely, some women may grit their teeth through uncomfortable sex because they feel that they are unfairly depriving their partner of the partner’s satisfaction. We have noted, however, that partners are distressed when they sense that the woman is not being straightforward about the fact that she is in pain. They don’t want to cause hurt or harm, and generally do not find sex pleasurable that causes pain.
- C. **Experiment** with sexually stimulating activity that does not involve penetration. Oral sex, sex using a vibrator, massage, kissing, fondling, have all been found to be pleasurable alternatives to intercourse. If some of these ideas are objectionable to one or both partners, this should be frankly discussed. We have found that many couples have gradually become interested in alternative activities by slow exposure and experimentation.

Again, clear communication is important, including paying attention to what is experienced as unpleasant.

D. Sexual activity - not orgasm oriented. Our culture tends to reduce sex to the idea of orgasm and ejaculation. Incorporating sexual and sensual play where the goal is simply to experience the moment has been liberating to many couples. Couples tell us that—if anything can be considered positive about vulvar pain—they have greatly expanded their definition of sex by concentrating on the pleasure of the moment and to greatly deemphasize orgasm.

3. When other problems occur, secondary to vulvar pain

A. Muscle spasm (vaginismus). Sometimes muscles spasm involuntarily as a response to fear of pain. This is much like involuntary blinking which will happen if there is a threat that something is flying straight for your eye. Sometimes it is difficult to sort out the origin of the pain. We will work with you to carefully determine whether you may be experiencing a muscle tightening in addition to vulvar pain. Fortunately there are techniques which work to overcome this symptom. You will work with your clinician or team to determine a treatment.

B. Partner sexual difficulty. Your partner could develop a sexual difficulty in response to your vulvar pain. This is understandable when you consider how frustrating the cycle of pain with sex can be for both of you. Sometimes partners withdraw from initiating sexual contact, or even touch contact, because of the fear of causing pain. Some men have developed erection difficulties. Perhaps they don't see the connection between not being able to get an erection and the fear of causing their partner pain. Couples who are experiencing more than one sexual problem at once may benefit from discussing this with a therapist who understands sexual functioning.

C. Low interest in sex. This bears repeating. If your experience with sexual activity before the onset of vulvar pain was positive, and your energy for sex was fairly high, the fact that you don't have interest in sex now is probably because of the frustrating challenge of the presence of pain. If you never had interest in sex and primarily engaged in sex for your partner's sake, you may want to examine for yourself what you want your sexual life to be and what it would take (besides being without pain) for this to happen. If you have always wanted to avoid sexual contact because you find it unpleasant or fearful, discussing this with a therapist or trusted advisor may provide you with some insight about this problem.

HOW TO USE VAGINAL DILATORS

At times, the use of vaginal dilators for your vulvar condition may be recommended. The following is a discussion on the use of vaginal dilators. Pain with sexual activity can cause some reflexive tension in pelvic muscles. Anticipating that an activity may be painful can cause muscles to tense voluntarily or involuntarily, as a way to be self-protective. Sometimes a woman can benefit from learning more about how to gain voluntary control over the pelvic muscles. At times, **vaginal dilators** may be recommended.

Vaginal dilators are cylinders, rounded at the end, which come in various sizes. The dilator is inserted into the vagina in the privacy of your home – to help stretch and relax the vaginal muscles. The smallest dilator is about the diameter of a tampon. Dilators will be recommended for you in the appropriate size, with discussion about how to use them. These instructions can be used for reference in between clinic visits. You may want to keep this handout with you when you are first using dilators. Various types of dilators are available.

Getting ready to use dilators. Select a time and place when you can have privacy to do dilator therapy. Many women elect to use their bedroom, and to use dilators while lying down. Plan for about 10 to 15 minutes a day, four to five times a week. If this seems like too often or too long, start with what you feel comfortable with. But do start! We want you to be successful, and this will require repetition.

What you'll need. At first you may benefit from using a mirror in order to see the vulva and vaginal opening. Locate the labia and clitoris as well as the opening to your vagina. You will need the dilator, and lubrication. Lubrication can be purchased in any drug store. Lubrication products are located in the same area as birth control items and condoms. A list of lubricants is provided at the end of this section.

Beginning with dilators. Use a small amount of lubrication on the dilator. Tense and relax the pelvic floor muscles a few times. When you are in the “relax” phase of the exercise, insert the prescribed dilator. Some women find it helpful to push against the dilator, as if they were attempting to expel it. Notice your breathing. If you are tense and breathing is shallow, stop and attend to the tension before you proceed. Insert the dilator about two inches or so. You may be able to insert the dilator further. The pelvic muscles which tend to tense up are about an inch or so inside the vaginal

opening, so the goal of this therapy is not how far you can insert the dilator, but what is happening to the muscles when you insert.

If you have pain, stop. Dilator therapy won't be effective if you are in pain. Check with the health care provider supervising your dilator therapy. If you are feeling a physical tension, and you want to see if you can proceed with the dilator and learn some relaxation of that muscle, go ahead, but stop if there is pain.

Leave the dilator in place for 10 minutes to 20 minutes. You may want to catch up on a little reading during these minutes. Remove the dilator.

Changing dilator sizes. When you can effortlessly insert the dilator, it may be time to move to a larger size. Follow the steps above. At first use the dilator that you have become accustomed to. Then after a few minutes remove this dilator and use the next size. Again, stop if you have pain.

Care of dilators. Dilators do not need any special treatment. They can be cleaned with soap and water, making sure they are rinsed thoroughly.

Kegel exercises. Kegel exercises can help you gain voluntary control over pelvic muscles. When you are urinating, contract your pelvic muscles to start and stop the stream of urine. The goal of Kegel exercises is not to tense the muscles, but to learn to relax them. When you are contracting the pelvic muscles, you are tensing them. When you stop the contracting, push slightly as if you were attempting to expel urine or a tampon. This is part of the relaxation of the pelvic muscles. Pay particular attention to this relaxation aspect. These exercises should be repeated several times a day, and they can be helpful to strengthen the pelvic floor. Since the pelvic floor muscles are also involved in orgasmic pleasure, you may also be able to enhance orgasm.

Other helpful exercises. You can locate the trouble spots that muscle tension and spasms can cause. If you are lying on your back, the problem spot most often reported is the lower part of the vaginal opening—nearest the perineum (the area between the vaginal opening and the anal opening). You may use a thumb or finger to gently massage the muscle to see if it responds to your attempts to relax. Some women have found it effective to “work” the pelvic floor muscles while they are taking a shower. They put a foot up on the side of the tub, use a little bit of lubrication applied to the

entranceway with their fingers, and again locate the muscle and massage it gently.

Lubrication Information

Decreased lubrication often is a result of hormonal changes in a woman's body. Many medications result in a decrease of vaginal lubrication, for example: antihistamines, hormonal forms of birth control, ADHD medications, depression medications, and chemotherapy. Breast-feeding and menopause also affect levels of lubrication. Studies have shown that women who have experienced sexual assault/trauma produce less lubrication than women who have not experience sexual violence.

Furthermore, natural lubrication created within the vagina often does not find its way to the more external portions of the vulva. This dryness can cause irritation and chafing. The application of lubrication can result in a woman experiencing more comfort as well as more sexual satisfaction.

Lubricants containing the ingredients LIDOCAINE or BENZOCAINE are designed to reduce discomfort and are usually sold as oral or anal lubricants. These ingredients numb the tissue and may help in managing surface pain and dryness, but please be cautious in using these products. Although this type of lubricant is meant to eliminate or reduce pain during sexual relations, the ingredients dull the body's natural defense mechanism (*pain*), which is responsible for telling you when something is possibly tearing in your body. If you numb yourself with a lidocaine or benzocaine type of lubricant you may increase your risk of injury and infection.

5 Main Groups of Lubricants

Petroleum-Based Lubricants

TYPES: Mineral oil, Vaseline, Stroke 29, Jack Off

NEGATIVES: Irritates vulvas, DESTROYS LATEX CONDOMS, **stains fabric**. Most Commonly Used!

POSITIVES: Cheap, and easily accessible.

Natural Oil-based Lubricants

The rule of thumb is, generally, if you can eat it, it's safe to go inside the vagina. The body can clear out natural oils more easily than petroleum-based lubricants.

TYPES: Vegetable/Corn/Avocado/Peanut/Olive Oils. Butter and Crisco.

NEGATIVES: DESTROYS LATEX CONDOMS, stains fabric, can easily be confused with petroleum-based lubricants.

POSITIVES: Great for vulva massage, safe for the vagina, safe to eat, good for all forms of sexual play, cheap, and easily accessible.

Water-based Lubricants with GLYCERIN

Glycerin is added to most water-based lubes and produces a slightly sweet taste. The most commonly sold lubricants contain synthetic glycerin. The most readily available lubricants for sale in drugstores and supermarkets that are safe for use with condoms are water-based glycerin lubricants. Most flavored lubes and warming lubes contain large amounts of glycerin.

TYPES: Astroglide, KY Liquid/Jelly, Embrace, Frixxion, Wet, Good Head, Wet Flavors, ID, and Replens (suppositories for dry vaginas)

NEGATIVES: Dries out quickly, often sticky or tacky, creates an open invitation for yeast infections.

POSITIVES: Does not stain fabric, safe to use with latex condoms.

Water-based Lubricants without GLYCERIN

If recurrent yeast infections or extremely sensitive genitals are a problem, we recommend this type of lubricant.

TYPES: Maximus, Liquid Silk, Slippery Stuff, Oh My, Sensual Organics, Probe

NEGATIVES: Can have a bitter taste due to the absence of glycerin.

POSITIVES: Lasts longer than lubricants with glycerin, reduces irritation to the genitals, does not stain fabric, is safe with latex condoms, is usually thicker and provides a cushion.

Silicone-based Lubricants

Silicone lasts the longest out of all lubricants and is safe to use with condoms. Some people are concerned that silicone lubricant is hazardous because they are comparing it to the silicone used in breast implants. Silicone lubrication is only a fraction of what is placed in breast implants and cannot leak into the bloodstream as may happen with silicone implants. Most silicone lubricants are also hypo-allergenic.

TYPES: Eros, Wet Platinum, ID Millennium, Pink, Gun Oil

NEGATIVES: Expensive, cannot use with silicone or cyberskin sex dilators, must be washed off with soap and water if too much is used.

POSITIVES: A little goes a long way, great for sensitive genitals, feels like petroleum-based lubricant but is safe for condoms as well as internal use, stays on underwater, is odorless and tasteless, lasts three times as long as water-based lubricants, clings to internal walls, hypo-allergenic.

Based on investigation by Megan Andelloux, www.ohmegan.com

Low Oxalate Diet with Calcium Citrate Supplementation for Vulvar Pain

Over the last few years, there has been an emphasis on using a low oxalate diet with calcium supplementation to treat vulvar pain. Calcium citrate inhibits the activity of hyaluronidase, an enzyme which triggers the breakdown of a component of connective tissue – hyaluronic acid. This breakdown results in oxalate releasing histamine, which may be associated with pain.

While this treatment regimen is generally not recommended for all patients with vulvodynia, some people have found relief with various aspects of this diet.

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The following information was prepared by a dietitian at the University of Michigan Hospitals.

GOALS:

- To alleviate and control pain associated with vulvar pain.
- This diet should be considered a “trial” for 3 months to 1 year. It may alleviate the pain for some individuals.
- If symptoms decrease, ask your health care provider about how long to continue.

GUIDELINES:

- Eliminate all foods in the high oxalate column.
- Limit foods in the moderate oxalate list to 3 times a week.
- Drink at least 12-14 cups of water each day.

SUPPLEMENT:

- Take calcium citrate without Vitamin D.

- Two Citracal tablets, three times a day is recommended.
- Take calcium citrate without food on an “empty stomach” approximately forty-five minutes before eating.
- Take no more than 250 mg of Vitamin C per day. It is a precursor of calcium citrate.

Dietary Recommendations:

If you do decide to pursue the low oxalate diet with calcium citrate supplementation, some dietary recommendations are included below:

Diet Guidelines

**Little or No Moderate High Oxalate FOOD Oxalate (<2mg/serving)
Oxalate (2-10mg/serving) Foods (>10mg/serving)**

Beverages:

- Limeade and lemonade (no peels)
- Alcohol: bottled beer, distilled alcohol and wines
- Coffee (limit to 8 oz/day)
- Carbonated cola (limit to 12 oz/day)
- Draft beer
- Ovaltine and other beverage mixes
- Tea
- Cocoa

Vegetables:

- Avocado
- Brussels sprouts
- Cauliflower
- Cabbage
- Mushrooms
- Onions
- Peas (green), fresh or frozen
- Potatoes, white
- Radishes
- Asparagus
- Broccoli
- Carrots
- Corn: Sweet white, Sweet yellow
- Cucumber, peeled
- Lettuce
- Lima beans
- Parsnips

Peas (green), canned
Tomato, 1 small or juice (4 oz)
Turnips
Beans (green or wax)
Beets (tops, roots, greens)
Celery
Chives
Dried beans
Eggplant
Greens: chard, collards, dandelion, escarole, kale, mustard, pokeweed, spinach
Leeks
Okra
Parsley
Peppers (green)
Potatoes (sweet)
Rutabagas
Summer squash
Watercress
Fruits/ Juices:
Apple juice
Avocado
Banana
Cherries (Bing)
Grapefruit (fruit and juice)
Grapes (green)
Mangoes
Melons: Cantaloupe, Casaba, Honeydew, Watermelon
Nectarines
Peaches
Pineapple juice
Plums (green or yellow)
Apple
Apricots
Black currants
Cherries (red, sour)
Cranberry juice (4 oz)
Grape juice (4 oz)
Orange juice (4 oz)
Orange

Peaches
Pears
Pineapple
Plums, purple
Prunes
Blackberries
Blueberries
Cranberries
Cranberry sauce
Currants (red)
Dewberries
Fruit cocktail
Grapes (purple)
Gooseberries
Raspberries
Rhubarb
Strawberries
Tangerines
Juices made from the above fruits

Grains:

Bread, Cereals, Crackers
Macaroni, pasta, spaghetti (plain)
Rice
Cornbread
Sponge cake
Pasta dishes with tomato sauce
Fruit cake
Grits, white corn
Soybean crackers
Wheat bran and germ

Dairy Products:

Buttermilk, Whole, low fat or skim milk
Yogurt with allowed fruit

Meat and substitutes:

Beef, lamb or pork
Cheese
Eggs
Fish and shellfish
Poultry
Sardines

Peanut butter

Tofu

Fats and oils:

Bacon

Butter

Margarine

Mayonnaise

Salad dressing

Vegetable oils

Nuts: all

Miscellaneous:

Candies, hard (not nuts or chocolate)

Coconut

Jelly or preserves (made with allowed fruits)

Lemon, lime juice

Salt

Soups with allowed ingredients

Sugar

Chicken noodle soup, dehydrated

Pepper (limit to 1 tsp./day)

Candies with chocolate and/or nuts

Chocolate, cocoa

Lemon, lime or orange peel

Marmalade

Tomato soup

Vegetable soup

Additional resources:

Rowan's Resources – www.branwen.com/rowan/oxalate.htm

The Vulvar Pain Foundation, 433 Ward Street, Graham, NC 27253.

SAMPLE MENU

Breakfast:

Skim milk

Bagel

Grapefruit or grapefruit juice

Margarine, jelly

Lunch:

Tuna fish sandwich

Mayonnaise

Grapes

Skim milk

Dinner:

Baked chicken

Mashed potatoes

Peas

Bread, margarine

Fruit

Skim milk

Snacks:

Fruits from "little or no oxalate list"

Milk or yogurt

OTHER VULVAR CONDITIONS

Yeast Infections

Yeast infections are a common vulvar infection. Diabetes, pregnancy, antibiotic use, a suppressed immune system and zinc deficiencies are factors that predispose women to yeast infections. *Candida albicans* is the most frequent cause. The vagina, as well as the vulva, may be infected also. Many women in the reproductive age group have yeast present in the vagina or vulva without symptoms. Yeast infections generally are not sexually transmitted, but there are exceptions and you may want to address whether or not your partner should be treated.

Symptoms of yeast infections can include redness, itching and a whitish, clumpy discharge. For women with recurrent yeast infection, the symptoms tend to flare at the same time during each menstrual cycle. Sometimes women have burning with urination. Intercourse may be painful.

Some women complain of vaginal dryness.

Many times patients with symptoms thought to be from yeast do not have the fungus. To diagnose this infection, the discharge on the skin of the vulva or in the vagina may be taken and examined under a microscope. A culture may be sent to the laboratory. If a culture is sent, it can take up to two weeks to determine if yeast are present. If a yeast culture is taken, you will be contacted if it is positive, otherwise, assume it is negative. If an infection is present, antifungal drugs are the usual treatment. A cream or tablet (or both) can be inserted into the vagina and applied to the vulvar skin. Occasionally, powders are used to treat yeast. Oral medications can also be used to treat yeast infections (see fluconazole). Many women with recurrent vaginal candidiasis can be effectively treated with intravaginal boric acid. An O gel capsule is filled half way (600 mg, boric acid) and placed into the vagina nightly for two weeks.

If you have recurrent yeast, at times twice weekly intravaginal boric acid is used (for example, on Monday night and on Thursday night) to prevent recurrences. Many resistant candida strains will respond to boric acid. It is important to keep this medication (as well as all medications discussed) away from children. Do not become pregnant while taking this medication. If you experience watery discharge, redness or burning, consider putting some Vaseline between the inner lips. Do not have unprotected sex while taking this medication. Do not use this medication if you are breastfeeding.

Patients with recurrent infections may benefit from limiting large amounts of sugars (sucrose and lactose) from their diets. Such sources would include candies, syrup, milk, cottage cheese and artificial sweeteners containing lactose.

Condyloma Acuminatum

Genital warts (condyloma acuminata), like warts on other parts of the body, are caused by the human papilloma virus (HPV). This is the same kind of virus that causes warts on the hands and feet. They are usually spread to the vulva through sexual contact but can in some instances be spread by other means. Women of childbearing age are the most susceptible to infection with HPV. The growths are occasionally seen before puberty or after menopause.

The vulva, particularly at the opening of the vagina (vestibule) and the labial folds, is the most common site of this disease. Lesions can also arise on the skin near the anus, vagina, cervix and urethra. They usually appear first as a small thickened area of skin with definite edges.

The wart may become surrounded by seedlings (smaller warts) that may grow to involve other areas. Occasionally, they spread and enlarge, forming a large cluster of warts that look like tiny cauliflower. The warts appear on the vulva as raised and sometimes reddened patches that may hurt or itch.

There are several ways to treat genital warts:

One topical therapy is the application of trichloroacetic acid (TCA) to the warts. Treatments occur weekly (by the health care provider) until the warts are gone. Burning may temporarily follow its application. Imiquimod (Aldara®) is another topical drug for warts. Patients place it onto the warts three times a week. It needs to stay on for 6-10 hours then it is washed off with a wet wash cloth. Another topical medication is Condylox® (also applied by patients). Interferon, a drug that is injected into the warts or into a muscle, may be used for recurrent lesions or for immunosuppressed patients. Laser treatment or Loop electroexcision are used to treat condylomata at times. Excision with a scalpel under local or general anesthesia is sometimes necessary.

These treatments are not always successful; the warts may come back. It is important to watch for recurrences.

Lichen Sclerosus

Lichen sclerosus is a skin disorder that affects the vulva. It may occur in any age group. The exact cause of lichen sclerosus is unknown. It is not an infection that you caught from anyone, and you cannot transmit it to others. There have been reports of family members with lichen sclerosus, thus it may have a genetic link. There is also the possibility that it has an

autoimmune component. It is characterized by small white patches that are thin and have a crinkled appearance, looking like cigarette paper at times. It may involve the entire vulvar area (from the clitoris to the anus). Often, changes of the clitoral foreskin hide the clitoris. The labia minora almost completely disappear at times. Not uncommonly, splitting of the skin in the midline is seen. Tears may also develop in the natural folds of the vulva. The vaginal opening may become smaller, interfering with intercourse. Occasionally the tissue breaks down, forming an ulcerative lesion. It may be a chronic process which at times is not curable. The disease does not spread into the vagina. Itching is the primary symptom.

A biopsy (a minor surgical procedure to remove a small piece of tissue that is then examined under a microscope), is performed to make the diagnosis. The goal of treatment is to eliminate itching and protect the skin from damage. Occasionally, complete resolution of the abnormal vulvar appearance may occur. More commonly, the skin changes of lichen sclerosus will not completely resolve. This does not mean the treatments are not helping. Various medications are used to improve the skin condition. Although testosterone had been used frequently in the past for treatment, the current therapy is potent topical steroids in ointment form. Ointments tend to be gentler than creams on vulvar skin. Temovate® (clobetasol propionate 0.05%) is a frequently prescribed topical treatment. Following the initial use of clobetasol propionate 0.05% ointment, the steroid content of the ointment is decreased gradually. Long term topical steroid use is often required. During early treatment, avoidance of tight clothing will prevent further tissue damage. Several follow-up appointments will be necessary to evaluate response to treatment. Many people have wondered if lichen sclerosus can turn into cancer. Lichen sclerosus scars the skin, and in theory, could increase the risk for a local skin cancer (this happens in 3% to 5% of patients). You will need to be followed closely to have the vulva examined at regular intervals. A sore or ulcer that doesn't heal in a few weeks, a lesion that bleeds easily, or bumps or raised lesions that are becoming larger are signs of a skin cancer. In some cases, an additional biopsy may be indicated. You should examine the vulva monthly and have regular visits with your health care provider to follow the skin appearance. (see Vulvar Self Exam, page 5)

SQUAMOUS CELL HYPERPLASIA

Squamous cell hyperplasia (formerly termed hyperplastic dystrophy) is an abnormal growth of the skin of the vulva. It has a variety of appearances. It

may present as a pink or red vulva. It frequently appears as elevated white patches. Moisture, scratching, scrubbing and medications may cause variations in the appearance of the lesions. The size of the lesions ranges from small to extensive. The areas most frequently involved are the hood of the clitoris, labia majora, outer aspect of the labia minora and the posterior commissure. Lesions may also extend to the lateral surface of the labia majora and even to the thighs. When the skin becomes too thick, hardened patches on the vulvar area may appear. This is related to chronic irritation. A biopsy (a minor surgical procedure to remove a small piece of tissue that is then examined under a microscope) is often performed to diagnose this problem.

Many things can trigger itching on the vulva. The itching generally stops when the skin heals. Remember that it took a long time for the squamous cell hyperplasia to develop, so don't expect it to improve overnight. It is often chronic and may require long-term treatment with steroid ointments. These are rubbed into the vulvar tissue. Squamous cell hyperplasia is sometimes observed next to lesions of invasive squamous cell cancer. You will need to be followed closely while you have squamous cell hyperplasia. Patients with a combination of lichen sclerosus and squamous cell hyperplasia are at an increased risk for development of vulvar cancer.

Vulvar Intraepithelial Neoplasia

Vulvar intraepithelial neoplasia (VIN) is a type of precancerous vulvar tissue abnormality. It is caused by changes in the cells of the vulvar tissue that allow them to grow abnormally. The human papilloma virus (HPV) has been linked to VIN. VIN can progress to invasive cancer of the vulva. This happens in only a small portion of cases and usually progresses slowly. Patients may be without symptoms or complain of pruritus (itching) or burning. Raised brown, red, pink, white, or gray lesions of various colors may be present. Tests to diagnose VIN include colposcopy (viewing of the cervix, vulva or vagina under magnification with a special instrument) and biopsy (a minor surgical procedure to remove a small piece of tissue that is then examined under a microscope).

Treatment depends on the degree of the disease. VIN 3 can usually be treated successfully with surgical or laser removal. VIN may reoccur. For this reason, and because VIN may not produce any symptoms, it is important to have regular checkups by your health care provider. This is especially true if you smoke, as this contributes to the recurrence and progression of the disease.

VULVAR CARE FOLLOWING LASER SURGERY

The following are instructions for vulvar care after laser therapy:

1. Apply ice or cool gel packs for the first 12-24 hours. Do not leave the ice on for more than 20 minutes. Allow the vulva to come to room temperature before reapplying ice.
2. Take a Sitz bath 3 times per day with warm water and Instant Ocean, sea salt or Epsom salts.
3. Dry area well thereafter.
4. Apply silvadene cream (if not allergic to sulfa medications), Carrington's gel, or Bacitracin afterwards.
5. Cleanse area with salt water solution after each void or bowel movement if soiled.
6. For symptomatic relief you may use warm tea bags or lightly apply Witch Hazel in between Sitz baths.
7. You will be given oral pain medication as well as a stool softener to prevent constipation.
8. If you develop extreme redness around the lasered area or a foul discharge, then contact your health care provider.

Paget's Disease of the Vulva

Vulvar Paget's disease appears as a red velvety area with white islands of tissue on the vulva. At times it may be pink. Occasionally there are moist oozing ulcerations that bleed easily. Itching is present in over half of the patients. Soreness may also be present. Almost all patients are postmenopausal, Caucasian women. The cause of Paget's disease is unknown. It is diagnosed by biopsy (a minor surgical procedure to remove a small piece of tissue that is then examined under a microscope) and is usually treated with surgery. It is rarely associated with an underlying cancer on the vulva. Genital Paget's disease may however be related to a primary carcinoma of the rectum, urethra or bladder.

Lichen Planus

Lichen planus is a skin condition characterized by itchy bumps on the shins, the inner wrist, and the hands. A particular type of lichen planus affects the mucous membranes of the mouth and external genitalia. It often involves the vagina as well as the vulva. It can resemble other vulvar skin

conditions. It is diagnosed by biopsy. This is a minor procedure often done in the office under local anesthesia. Small areas of skin are removed and sent for analysis. At times the biopsy does not reveal lichen planus yet the mouth and vulvar appearance are consistent with this diagnosis. The exact cause of lichen planus is unknown. It is not believed to be an infectious disease. The lesions consist of inflamed skin, but what causes the inflammation is unknown. In erosive lichen planus, the thin mucous membranes inside the mouth and vagina lose their top layer when they become involved with lichen planus, so red erosions rather than bumps develop in these areas.

Erosive lichen planus may be painful in the mouth and vagina and secondary infection may occur. If the areas touch one another, scarring may occur resulting in a narrowing or complete closure of the vagina. Lichen planus is often improved with various creams and ointments. Several drugs are used to treat this condition. Vaginal dilators may be used to prevent scarring. If scarring has occurred, vaginal dilators may be used to help prevent further scar formation. Vaginal dilators may also be recommended prior to surgery. Surgical separation of the vaginal scar tissue is sometimes necessary.

You should pay close attention to any changes in the vaginal discharge. If vaginal discharge occurs, it may indicate an erosion or secondary infection. Medication is most often used on a regular basis to maintain optimal tissue status, rather than only with flares in disease. There is a slightly increased risk of squamous cell carcinoma of the vulva developing in patients with vulvovaginal lichen planus. Regular visits with your health care provider and monthly vulvar self examinations will be necessary.

DESQUAMATIVE INFLAMMATORY VAGINITIS (DIV) (Adapted from Harvard Vanguard Medical Associates)

Desquamative inflammatory vaginitis (DIV) is a cause of persistent vaginitis. It is often associated with painful intercourse and can occur at any age of reproductive life and during menopause. Women often have had significant vaginal discharge for years or suddenly develop discharge with irritation of the vulva and vagina. The inflammation may cause the vaginal wall to peel or shed, called desquamation. DIV is not a common cause of vaginitis.

Cause

The cause (or causes) of DIV remains unknown. It is not cancerous or contagious or sexually transmitted.

Signs and Symptoms

Women will have an excessive discharge that may have been present for years (often yellowgreen, but may be bloody). The discharge may be associated with vulvar burning, irritation and itching. Intercourse is often uncomfortable or painful. Some women complain of odor. The pap smear may be abnormal.

Diagnosis

Diagnosis is made by the typical findings of copious yellow-green vaginal discharge, and elevated pH taken from the vaginal sidewall. The vagina is reddened and inflamed. Under the microscope the clinician sees many white blood cells, and cells shed from the vagina wall called parabasal cells. The normal healthy vaginal bacteria, lactobacilli, are absent. The condition is often mistakenly diagnosed as Trichomonas or vaginal atrophy from low estrogen levels.

Treatment

DIV requires lengthy treatment. It is treated with hydrocortisone and intravaginal antibiotics. If combined medication are used, these medications may be made up by a compounding pharmacy. Sometimes, one course of treatment is all that is needed while at other times there is a need on-going maintenance for this problem.

Additional Patient Education Information is available on these conditions as well as other conditions at:www.issvd.org <http://libbyedwardsmd.com/>

MEDICATIONS USED FOR VULVAR DISEASES

Multiple medications are used in treating various vulvar conditions. The following information will be helpful to you in understanding the medication prescribed for your particular condition.

SAFETY GUIDELINES

1. Certain medications are not to be taken if you are pregnant or planning a pregnancy.
2. Discuss questions regarding medication effects and side effects with your health care provider. Report significant side effects or changes.
3. Discuss compatibility of new medications with the prescribing health care provider.
4. Avoid mixing medications with alcohol.
5. Avoid driving and hazardous activities if you are drowsy or in severe pain.
6. Take medications as prescribed - please follow instructions.
7. The prescription of medications requires close medical monitoring. Appointments will be scheduled at appropriate intervals, at which time prescriptions will be refilled, changed, or discontinued.

The following are several drugs used to treat various vulvar conditions. The first category described, tricyclic antidepressants are often used for the treatment of vulvar pain.

TRICYCLIC ANTIDEPRESSANTS are classically used to relieve depression and anxiety.

Drugs that are in this category include, Elavil® (amitriptyline), Norpramin® (desipramine) and Pamelor® (nortriptyline). Tricyclic antidepressants may also be used for the treatment of a variety of pain conditions. They must be taken regularly to be effective. Do not skip doses, even if you feel that you do not need them. The drug must be taken regularly for three to six weeks before its full effect is felt. Do not stop taking these medications abruptly, especially if you have taken large dose for a long time. You will need to gradually decrease your dose per your health care provider's recommendations.

Before using this medication

Tell your health care provider and pharmacist if you

- are pregnant or intend to become pregnant while using this medicine
- are allergic to any medicine, either prescription or nonprescription (OTC - over the counter)

- are breast-feeding
- are taking any other prescription or nonprescription (OTC) medicine
- have any other medical problems (for example, seizures, overactive thyroid gland, heart condition)
- have more than one alcohol-containing drink per day

Proper use of this medicine. Take this medicine only as directed by your health care provider.

- This medicine will add to the effects of alcohol and other CNS depressants (medicines that make you drowsy or less alert). Do not consume more than one alcoholic drink per day while on tricyclic antidepressants. Check with your health care provider before taking any such depressants while you are taking this medicine.
- This medicine may cause some people to become drowsy or less alert than they are normally. Make sure you know how you react before you drive, use machines, or do other jobs that require you to be alert. Dizziness, lightheadedness, or fainting may occur, especially when getting up from a lying or sitting position. Getting up slowly may help.
- The effects of this medicine may last for 3 to 7 days after you stop taking it. Make sure you continue to follow the precautions during this time.
- Take tricyclic antidepressants once a day, approximately two hours before bedtime. If you forget to take it until the next morning, do not take the missed dose. Do not take a double dose.

Possible side effects of this medicine

- Dry mouth, drowsiness, weight gain and constipation.
- Less common side effects that should be reported to your health care provider: Blurred vision, memory loss, confusion or delirium, decreased sexual drive; difficulty in swallowing; irregular heart beat
- Tricyclic antidepressants can make your skin more sensitive to sunlight than usual. Suggestions to counteract specific side effects: for dry mouth, suck sugarless hard candies, increase fluids, for constipation, use stool softeners, eat a high fiber diet. For sun skin damage, wear protective clothing and a sunscreen preparation.

Drug interactions

- Monoamine Oxidase Inhibitors (MAO's)- do not use in conjunction with cyclic antidepressants. These drugs are Phenelzine (Nardil) and Tranylcypromine (Parnate) and Isocarboxazid (Marplan).
- Amphetamines should not be used with antidepressants

- Antihistamines/anticholinergics (Benadryl, Hydroxyzine, Brompheniramine in Dimetapp, Chlorpheniramine in Chlor-trimeton)- activity may increase with tricyclic antidepressant drugs. The effects are dry mouth, constipation. Urinary retention and glaucoma have been seen.
- Barbiturates (Phenobarbital, Pentobarbital, Amobarbital, Vutalbitol in Fioricet) – patients on tricyclic antidepressants respond better without barbiturates; it has been recommended that barbiturates be avoided. Benzodiazepines do not appear to affect tricyclic antidepressant serum concentrations.
- Alcohol- do not drink more than one drink per day
- Bethanidine- avoid cyclic antidepressants.
- Clonidine (Catapres)- Cyclic antidepressants should be avoided if possible.
- Guanabenz (Wytensin)- monitor for reduced antihypertensive response when cyclic antidepressants are added to Guanabenz therapy. If Guanabenz is withdrawn in the presence of cyclic antidepressants, monitor for exaggerated rebound hypertension.
- Guanfacine (Tenex)- monitor for reduced antihypertensive response. If Guanfacine is withdrawn in the presence of cyclic antidepressants, monitor for exaggerated rebound hypertension.
- Debrisoquin- Cyclic antidepressants inhibit the antihypertensive response to Debrisoquin.
- Antabuse (Disulfiram)- acute organic brain syndrome has been reported.
- Prozac- Monitor for increased antidepressant levels; adjustment of the antidepressant dosage is likely to be required.
- Guanethidine (Ismelin)- avoid with antidepressants.
- Cimetidine (Tagamet)- increased serum concentrations of doxepin (Zonalon). Be alert for evidence of Doxepin toxicity (severe dry mouth, blurred vision, urinary retention, tachycardia, constipation, postural hypotension). It also increases Nortriptyline (Pamelor) concentrations.
- Lithium- Lithium and cyclic antidepressants should be used cautiously in elderly patients. Monitor for evidence of neurotoxicity such as tremors, disorders of mentation, ataxia, and seizures.
- Ritalin- enhanced antidepressant effect may occur.
- Neuroleptics- if combined with cyclic antidepressants, be alert for evidence of increased toxicity and altered therapeutic response.
- Neo-Synephrine- Enhanced pressor responses have been reported. Do not use with cyclic antidepressants.
- Other drugs which may interact:
Charcoal

Dicumarol - Coumadin
Haloperidol (Haldol)
Levodopa
Pargyline (Eutonyl)
Phenothiazines
Selegiline (Eldepryl)

NEURONTIN – GABAPENTIN (ORAL)

• GABAPENTIN is used to help control some types of seizures in the treatment of epilepsy, but is also used by pain clinics to control various forms of pain. It helps control pain by decreasing the excessive impulses of nerves that transmit pain and by preventing the spread of increased excitation from abnormal to normal neurons.

BEFORE USING THIS MEDICINE

Tell your health care provider and pharmacist if you,

- are allergic to any medicine, either prescription or non-prescription (OTC);
- are pregnant or intend to become pregnant while using this medicine;
- are breast-feeding;
- are taking any other prescription or non-prescription (OTC) medicine, especially antacids;
- have any other medical problems, especially kidney disease.

PROPER USE OF THIS MEDICINE

- Take this medicine only as directed by your health care provider, to help your condition as much as possible. Do not take more or less of it, and do not take it more or less often than your health care provider ordered.
- Gabapentin may be taken with or without food.
- If you have trouble swallowing capsules, you may open the Gabapentin capsule and mix the medicine with applesauce or juice. Mix only one dose at a time just before taking it. Do not mix any doses to save for later, because the medicine may change over time and may not work properly.
- If you miss a dose of this medicine, take it as soon as possible. However, if it is less than two hours until your next dose, take the missed dose right away, and take the next dose one to two hours later. Then go back to your regular dosing schedule. Do not double doses unless instructed to do so by your health care provider.
- This medicine will add to the effects of alcohol and other CNS antidepressants (medicines that may make you drowsy or less alert).

Check with your health care provider or dentist before taking any such antidepressants while you are using this medicine.

- This medicine may cause blurred vision, double vision, clumsiness, unsteadiness, dizziness, drowsiness, or trouble in thinking. Make sure you know how you react to this medicine before you drive, use machines, or do other jobs that require you to be alert, well-coordinated, or able to think or see well. If these reactions are especially bothersome, check with your care provider.
- Do not stop taking this medicine without first checking with your care provider. Your care provider may want you to gradually reduce the amount you are taking before stopping completely.

POSSIBLE SIDE EFFECTS OF THIS MEDICINE

SIDE EFFECTS THAT SHOULD BE REPORTED TO YOUR HEALTH CARE PROVIDER:

- More common: clumsiness or unsteadiness; continuous, uncontrolled back and forth and/or rolling eye movements.
- Less common: depression, irritability, or other mood or mental changes; loss of memory.
- Rare: fever or chills; cough or hoarseness; lower back or side pain; painful or difficult urination.

SIDE EFFECTS THAT USUALLY DO NOT REQUIRE MEDICAL ATTENTION:

- These possible side effects may go away during treatment; however, if they continue or are bothersome, check with your health care provider or pharmacist.
- More common: blurred or double vision; dizziness; drowsiness; muscle ache or pain; swelling of hands, feet, or lower legs; trembling or shaking; unusual tiredness or weakness.
- Less common: diarrhea; dryness of mouth or throat; frequent urination; headache; indigestion; low blood pressure; nausea; noise in ears; runny nose; slurred speech; trouble in thinking; trouble in sleeping; vomiting; weakness or loss of strength; weight gain.

CORTICOSTEROIDS are used to help relieve redness, swelling, itching, and discomfort of many skin problems. They belong to the general family of medicines called steroids. These medications may be prescribed orally, topically, or, injected into the skin during a clinic visit.

Before using this medication

Tell your health care provider and pharmacist if you...

- are allergic to any medicine, either prescription or nonprescription (OTC - over the counter)
- are pregnant or intend to become pregnant while using this medicine
- are breast-feeding

Proper use of this medicine

- Do not use more often or for a longer time than ordered. To do so may increase absorption through the skin and the chance of side effects. In addition, too much use, especially on areas with thinner skin (for example, face, armpits, groin, vulva), may result in thinning of the skin and stretch marks.
- Apply a thin film to the affected area as directed.
- Do not bandage or otherwise wrap the area of the skin being treated.
- This medicine was prescribed for a specific skin problem. Do not use any leftover medicine on other skin problems without first checking with your health care provider since the medicine should not be used on many kinds of bacterial, virus, or fungus skin infections.
- If you miss a dose of this medicine, apply it as soon as possible. Then go back to your regular dosing schedule. However, if it is almost time for your next dose, do not apply the missed dose at all. Instead, go back to your regular dosing schedule.

Possible side effects

- The most common side effect seen on the vulva is increased vascularity and skin thinning.
- When the gel, lotion, cream, ointment or aerosol form of this medicine is applied, a mild, temporary stinging may be expected. This generally resolves gradually. Ointments are generally tolerated better than gels, lotions, creams and aerosols on the vulva.
- Side effects that should be reported to your health care provider:
⇒ Less common or rare: unusual tiredness or weakness; vomiting; weakness of the arms, legs, or trunk.
- Other side effects not listed above may also occur in some patients. If you notice any other effects, check with your health care provider.

ANTIFUNGALS:

Topic: Azole Topical Antifungals (Vaginal)

⇒ Blood-containing blisters or pus-containing blisters on skin; increased skin sensitivity; lack of healing of skin condition; loss of top skin; numbness in fingers; raised, dark red, wart-like spots on skin; skin pain, redness, itching, thinning of skin with easy bruising With long-term or improper use: acne or oily skin; backache; burning or itching of skin with pinhead-sized red blisters; irritability; mental depression; muscle cramps, pain, or weakness; nausea; rapid weight gain or loss; reddish purple lines (stretch marks) on arms, legs, trunk, or groin; skin color changes; softening of skin; stomach bloating, pain, cramping, or burning; swelling of feet or lower legs; tearing of the skin; unusual increase in hair growth; unusual loss of hair

About your medicine: Topical antifungals are used to treat fungus (yeast) infections of the vulva and the vagina.

Before using this medication

Tell your health care provider and pharmacist if you . . .

- are allergic to any medicine, either prescription or nonprescription (OTC - over the counter)

Proper use of this medicine:

- Antifungals usually come with patient directions. Read them carefully before using this medicine.
- Use this medicine at bedtime, unless otherwise directed by your health care provider.
- To help clear up your infection completely, it is very important that you keep using this medicine for the full time of treatment, even if your symptoms begin to clear up after a few days. If you stop using this medicine too soon, your symptoms may return.
- Do not stop using this medicine if your menstrual period starts during the time of treatment.
- Do not miss any doses.
- If you do miss a dose of this medicine, insert it as soon as possible. However, if it is almost time for your next dose, skip the missed dose and go back to your regular dosing schedule.
- To help clear up your infection completely and to help make sure it does not return, good health habits are also required.

⇒ Wear cotton panties (or pantyhose with cotton crotches) instead of synthetic (for example, nylon or rayon) panties.

⇒ Many vaginal infections are spread by having sex. A male sexual partner may carry the fungus on or in his penis. In certain circumstances, it may be

necessary for your partner to be treated. Do not have sex during treatment. Discuss with your health care provider if your partner should be treated.

Precautions while using this medicine:

- If your symptoms do not improve within a few days, or if they become worse, check with your health care provider.
- Vaginal medicines usually will come out of the vagina during treatment. To keep the medicine from getting on your clothing, wear a minipad or sanitary napkin.
- The use of tampons is not recommended since they may soak up the medicine.

Side effects that should be reported to your health care provider:

- Less common--Vaginal burning or other irritation not present before use of this medicine
- Rare--Skin rash or hives

Side effects that usually do not require medical attention:

- These possible side effects may go away during treatment; however, if they continue or are bothersome, check with your health care provider or pharmacist.
- Less common or rare--abdominal or stomach cramps or pain; burning or irritation of penis of sexual partner; headache.

Other side effects not listed above may also occur in some health care provider.

DIFLUCAN (Fluconazole) Fluconazole is an oral antifungal used to treat fungus infections.

Tablets: You may swallow the tablet whole or crush it.

Precautions:

- Check with your health care provider before taking if you are pregnant or breastfeeding or if you have liver disease, kidney disease, or other medical problems.
- Ask your health care provider or pharmacist before taking any other medications, including over-the-counter (nonprescription) products.
- Take this medicine exactly as your health care provider ordered. If you stop taking it too soon, the infection might return.
- Store at room temperature, and protect from heat, moisture, and direct light.

Missed Dose:

- Take the missed dose as soon as possible.
- Skip the missed dose if it is almost time for your next regular dose.
- Do not take two doses at the same time.

Side effects:

- If you have problems with these or other side effects, tell your health care provider: nausea, vomiting, stomach pain, bloating, diarrhea, headache, or skin rash. Some patients may have other side effects that are not listed below.
- The following side effects may be associated with more serious complications. Call your health care provider immediately if any of the following effects occur: Yellowing of skin and eyes; unusual bleeding or bruising; dark or amber

Liver Effects:

- Notify your care provider if you have a history of liver disease.
- Liver toxicity has occurred with antifungal treatment.
- Abnormal liver function has been observed during Fluconazole therapy. Approximately 1% of Fluconazole-treated patients have developed abnormal liver studies.
- When elevations of liver function tests are observed during Fluconazole therapy, close monitoring is recommended to detect the development of more serious liver injury.
- Fluconazole should be discontinued in patients who develop signs and symptoms consistent with liver disease. Liver disease is usually reversible upon discontinuing Fluconazole.
- Blood studies to check liver function may be required after six months of therapy.

Drug Interactions

Make sure your health care provider knows if you take any of the following medications.

- Oral Hypoglycemics (medicines to treat diabetes).
- Coumarin-Type Anticoagulants (blood thinners).
- Phenytoin(Dilantin or other seizure medications).
- Cyclosporine.
- Rifampin (antituberculin).
- Theophylline (asthma medication).
- Terfenadine (Seldane).
- Propulsid
- Lipitor
- AZT
- Tagamet
- Amitriptyline (Elavil).
- Fluconazole tablets taken with oral contraceptives: The clinical significance of these effects is presently unknown.

Contraindications:

- Do not use this medicine if you have ever had an allergic reaction to Fluconazole or similar medicines such as Miconazole. Fluconazole should be used cautiously in patients with hypersensitivity to other azoles.
- Dose reductions are recommended in patients with renal insufficiency.
- Immunocompromised patients who develop skin rashes while on Fluconazole should be monitored closely and the drug discontinued if the lesions progress.

Vulvar Conditions & Management:

An Educational Booklet for Patients

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