

UPDATE IN THE TREATMENT OF BACTERIAL VAGINOSIS

Bacterial Vaginosis BV is the most common vaginal infection in women of childbearing age in the United States accounting for over 10 million medical visits a year. Originally thought to be by an overgrowth of *Gardnerella vaginalis*, BV is now believed to be a synergistic polymicrobial infection, resulting in an alteration of the normal flora causing an increase in the pH and associated with discharge and odor.

Diagnosis is straight forward consisting of a dirty gray discharge, vaginal pH >5, fish-like odor, and characteristic "Clue Cells" on microscopy with the absence of WBC's. Vaginal culture is usually not needed to make the diagnosis but is helpful in patients with recurrent infections.

Traditional treatments consisting of:

- Intravaginal metonidazole 0.75% (Metrogel) twice daily for 5 days or once nightly for 7 nights.
- Clindamycin Vaginal Cream 2% (Cleocin) once nightly for 3 to 7 nights.
- Metronidazole 500mg (Flagyl) Orally twice or three times daily for 7 days.

- Tindamax 1gram once daily for 5 days or 2grams once daily for 2 days.

Persistent or Recurrent infections: (these should be culture proven)

- Boric Acid 600mg intravaginally twice daily for 2 weeks. PLUS an oral regimen for 7 days. Patients should refrain from intercourse during this treatment and be re-evaluated one week after completion of therapy. NOTE: 5% of patients will not be able to tolerate Boric Acid and will experience burning with initial use. Continued use will result in ulceration. Stop the medication if patients experience burning.
- For Patient who fail the above regimen: Clindamycin Vaginal Cream 2% nightly for 5 nights. No intercourse or tampon use during treatment. On the 6th day, start Boric Acid Suppositories intravaginally 500 or 600mg twice daily for 3 days, then once nightly for 6 nights. NuvaRing should be prescribed and used as you normally would in synchronization with the patients cycle or at anytime during the outlined regimen, even during the Clindamycin treatment week. NuvaRing promotes *Lactobacillus* which results in healthy flora.

A publication on Female Pelvic Medicine, Pelvic Organ Prolapse

and Continence from
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WELCOME to POP QUIZ,
A periodic publication to provide the practicing physician with concise, up to date, information in Female Pelvic Medicine, Restorative Pelvic Surgery, Urogynecology, and Incontinence.

NEWS

The new website is live. The new site contains extensive patient information and also contains a physician's section where you may access consents, referral forms, and patient education material.
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MYTHS, MISTRUTHS, AND MISINFORMATION

Chocolate is bad for your health. False.

A recent study in Germany found that small doses of chocolate every day could decrease your risk of having a heart attack or stroke by nearly 40 percent. The researchers found that individuals who had an average of 6 grams of dark chocolate per day, about one square of a chocolate bar, had a 39 percent lower risk of either heart attack or stroke. It is believed that flavonols contained in chocolate are responsible for the findings. Flavonols, also found in vegetables and red wine, help the muscles in blood vessels widen, which leads to a drop in blood pressure.

Eating extra Soy helps decrease Cholesterol levels in Postmenopausal women. False.

Eating extra Soy for one year does not help postmenopausal women lower their cholesterol levels according to a new study out of Florida State University. Researchers noted that long-term use of 25 grams of soy protein and 60 mg of isoflavones every day for a year showed no benefit in lower cholesterol supporting the FDA's decision to reevaluate its decision to allow soy product makers to claim heart benefits.

Hormone replacement therapy carries an increased risk in all postmenopausal women. False.

Recent guidelines on Hormone Therapy published by the North American Menopause Society state that the benefit-risk ratio for menopausal hormone therapy HT is favorable for women beginning hormone therapy close to menopause. Current evidence supports a consensus regarding the role of HT in postmenopausal women, when potential therapeutic benefits vs. risk are considered around the time of menopause. This favorable benefit-risk ratio decreases as women on HT get older and in older women who start HT later after the onset of menopause. For more information visit my web site at www.drjkm.com, see Physicians Section.

MENSTRUAL MIGRAINES



Migraine headache is the most common of all disabling headaches affecting 13% of Americans. It preferentially affects women in a 3:1 preponderance and her lifetime prevalence is 33%. Women affected by migraines are typically in their reproductive years.

Researchers believe migraines in women may be triggered by the withdrawal of estrogen in susceptible individuals either during natural menstrual cycle or as a result of cycling onto inert pills in oral contraceptives. An estimated 39% of menstruating women experience headaches with menses, and almost one third of these headaches meet established criteria for migraine headaches. When these migraine headaches occur at the time of menses, they may meet classification as Menstrual Migraines.

Formal diagnosis of migraine requires that at least two of four characteristics be present plus at least one of two associated symptoms be present. The four characteristics for migraine are:

- Moderate or severe pain
- Throbbing
- Unilateral location
- Intensification of headache upon activity

Associated symptoms include either nausea or both photophobia and phonophobia. Neck tension may also be present and while not part of the diagnostic criteria, is more common than nausea. Untreated, migraines usually last between 4 and 72 hours.

Menstrual Migraine is defined as migraine without aura that occurs in predictable association with menses. Its onset falls within a 5-day

window, spanning 2 days before the onset of menses through the third day of bleeding. The exclusion of aura in menstrual migraine is controversial but most experts agree that aura is uncommonly associated with menstrual migraine. This may be the result of the low-estrogen environment. Higher concentrations of estrogen are associated with and increase in the likelihood of aura.

Initial treatment of Menstrual Migraine is no different than that of other migraines. Mild and moderate attacks often respond to **non-steroidal anti-inflammatory drugs**. Mefenamic acid (Ponstel) 500mg every 8 hours or Diclofenac (Voltaren) 50mg schets or tablets, schets work faster; have been shown to be effective. When migraines are more severe, injectable ketorolac (Toradol) has been shown to be more effective than treatments with triptans or opioids. When oral non-steroidal anti-inflammatory drugs fail, oral migraine-specific medication such as ergotamines and triptans should be considered.

Ergots such as Dihydroergotamine (D.H.E 45, Migranal) belong to the oldest family of migraine specific drugs. These drugs tend not to be as popular today but remain an option in some patients. They are not indicated in patients who are pregnant or lactating.

Triptans such as Imitrex, Amerge, Frova, and others have shown to be effective in treatment acute migraines by their affect on serotonin and unlike analgesics, they address the underlying pathology of the attack, inhibiting the release of vasoactive peptides, promoting selective meningeal vasoconstriction and blocking pain pathways in the brainstem. They also often resolve the associated symptoms of nausea and photophobia. Triptans are classified as category C and therefore may be used in pregnancy (most data is on Imitrex). Imitrex may also be used in lactating women. Triptans should not be used in the presence of untreated hypertension or vascular disease.

Rebound headaches may occur with all acute treatments including analgesics, NSAID, caffeine-containing compounds, butalbital, ergotamine, opioid, or triptans when prescribed too often. The use of these agents should be limited to acute migraines and no more than 2 days a week to avoid rebound headaches. Also, it should be noted that butalbital containing compounds may cause rebound headaches even when given as infrequently as 5 days a month.

When traditional treatments for migraine fail in acute menstrual migraine, management goals shift towards prevention. Options include nonspecific (those that do not address estrogen as the

trigger) and specific (addressing estrogen as the trigger) strategies.

Nonspecific/Nonhormonal therapies to prevent menstrual migraines consist of non-steroidal anti-inflammatory agents, Triptan regimens and magnesium. Naproxen sodium, 550mg twice daily, administered 2 weeks prior to the anticipated onset of menses has been shown to reduce the overall duration and severity of menstrual migraines. Triptan regimens, Imetrex 25mg three times daily, Amerge 1mg daily and Frova 2.5mg twice daily, beginning 2 days before the anticipated onset of Menstrual Migraines have proven beneficial in many patients. The uses of oral magnesium, 360mg daily, beginning on the 15th day of the cycle and continuing through the menses, shortened the duration of menstrual migraines and improved menstrual complaints in some patients.

Hormonal therapy to prevent menstrual migraines attempts to eliminate or sufficiently minimize the premenstrual decline in estrogen that is believed to precipitate menstrual migraines. The use of hormones, specifically oral contraceptive, to prevent menstrual migraines has been investigated in numerous studies. Extended-cycle oral contraceptive use may offer many women relief over a longer period of time than traditional treatments. Regimens that forego monthly withdrawal bleeds and provide extended administration of active pills can afford women a lengthy reprieve from menstrual migraines. However, breakthrough bleeding is the most common side effect and often is unacceptable to many women. Women that do respond well to extended-cycle oral contraceptive will still need to have withdrawal bleeds at 3 month intervals. During these times adding estrogen at not less than 10 ug of the extended-cycle regimen usually prevents menstrual migraines during this time. (Example, if on a 30 ug pill, the amount of estrogen needed during the withdrawal week would be 20 ug daily). I have had reasonable results with the off label use of transdermal 0.1-mg ethinyl estradiol during the withdrawal week.

The use of **Menstrually Targeted Estrogen Supplement** may be used in women who have contraindications to or decline oral contraceptives. These estrogen dosages are lower and therefore may be appropriate these women. I have found 0.1-mg transdermal estrogen patch worn 7 days and applied just before the expected onset of menstrual migraine combined with naproxen sodium, 550mg twice daily, beneficial in many patients. The patient should be advised that this is an off label use (even though there are studies in the literature) and documentation should be made in her chart.