



KAISER PERMANENTE®

## URO-GYNECOLOGY PATIENT INFORMATION SHEET

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### FEMALE URINARY INCONTINENCE: WHAT IT IS AND WHAT YOU CAN DO ABOUT IT

#### What is Urinary Incontinence?

**Stress Incontinence** is a leakage of urine that occurs, for example, during coughing, laughing, lifting, or sneezing. This happens because the muscles and tissues supporting the bladder have been weakened. When there is an increase in pressure placed on the abdomen and bladder, such as during a cough, urine loss results. This is the most common cause of urinary incontinence.

Some women have stress incontinence because the sphincter muscle, which normally acts as a "valve" that keeps urine inside the bladder, is weakened. This is important to know, because treatments for urinary incontinence may be a little different if the sphincter is weakened.

**Urge Incontinence** is the inability to control the flow of urine - it is usually due to uncontrolled "bladder spasms." Women will say, "When I have to go, *I have to go!*" Women with this problem have bladders that do not allow them to fill and store urine properly. Once the bladder fills with a certain amount of urine, it becomes irritable and "spasms," resulting in leakage. This problem can be extremely embarrassing because a woman may soak through her undergarments or even the protection she is wearing.

**Overflow Incontinence** can be due to a poorly functioning bladder muscle or neurological problem. The bladder muscle does not "squeeze" or contract well enough so that it continues to fill up with urine until the urine finally "spills out." This leakage can be provoked by straining or coughing.

Sometimes this problem occurs because of an "obstruction" of the normal flow of urine. This happens, for instance, when the bladder, uterus, or vagina has "dropped" so much that it "kinks" the passageway. (the urethra) from which the urine normally flows. Sometimes simply "resupporting" these "dropped" pelvic organs treats this problem.

**Mixed Incontinence** is the combination of any of the above. This is important to know because treatment options may differ.

## **Lifestyle Changes:**

- 1. Stop smoking!** Nicotine from cigarettes is a bladder irritant! When nicotine is present in the body, it acts directly on the muscle of the bladder causing it to have spasms (whether you are in the bathroom or not!). Women who smoke often also have a chronic cough. If you suffer from stress incontinence, coughing most certainly brings on more episodes of urinary loss. Women who smoke and cough often put additional pressure on the muscles and supports to the bladder, thus further weakening them.
- 2. Eliminate caffeine!** Caffeine is also a bladder irritant! When caffeine is present in the body, it acts on the muscle of the bladder causing it to have spasms. Caffeine is also a diuretic, which means it causes your kidneys to excrete more urine, thus causing you to need to go to the bathroom more often. Note: Do not go "cold turkey" on your caffeine reduction as you may get caffeine withdrawal headaches. Instead, slowly wean down the amount you ingest. Be aware of products such as colas, other soft drinks, chocolate, and tea - these all contain caffeine.
- 3. Go to the Bathroom More Frequently** - This will reduce the amount of urine you are holding in your bladder. Be aware of the time and try to empty your bladder every 3 hours or so (many women already do this). This is important especially in women who have "bladder spasms" because these bladders are unpredictable - as soon as they get full of urine, they go into spasm, resulting in urine loss.
- 4. Exercise Your Pelvic Floor Muscle** - Daily! The pelvic floor muscle (the muscles that surround the bladder, vagina, rectum, and uterus) are a very important part of a woman's body. Unfortunately, women tend to ignore them. Our leg muscles are strengthened each time we walk, our arm muscles are used each time we bring a glass of water to our mouths, our neck and back muscles are used with us standing, walking, etc. Women cannot forget about their pelvic floor muscles! When these muscles are strengthened or toned, they can provide enormous support and control to the pelvic floor.

## **How to Do Pelvic Floor Muscle Exercises:**

### **Technique:**

1. Begin while lying down, knees bent and legs parted. Place one hand over lower abdomen.
2. Tighten the muscles around the vagina and urethra as if you are trying to prevent urine or gas (flatus) from leaking out.
3. With your abdominal hand, make sure you are not pushing or contracting your abdominal muscles.
4. Breathe! Do not hold your breath. Do not push down, but rather "pull up" on the vaginal muscles.
5. Think of the pelvic floor as an elevator. Contract muscles in stages, rising to successive levels slowly. Always tighten to the second level before lifting, coughing, sneezing, or standing. This takes practice but can definitely help.
6. Contract pelvic floor muscles for 3 - 5 seconds with a 5-second rest period between each contraction. An example schedule would be sets of 10, four times a day, every day. You can do your pelvic floor muscle exercises anytime, anywhere: while driving, watching TV, reading, etc.

7. If you have an urge to void, rather than running to the bathroom, stop what you are doing, squeeze/contract the pelvic muscles, hold 3 - 5 seconds, relax, and then squeeze again. The urge will subside and give you enough time to get to the bathroom.

## **The Key to Success of Pelvic Floor Muscle**

### **Exercises:**

The key to success of the Pelvic Floor Muscle (Kegel) exercises is that once you can nicely isolate them, recruit them in the times of need!

For example, if you anticipate a cough or sneeze coming on, try and squeeze your pelvic floor muscle first. Practice squeezing them while walking, jogging, etc. It is not easy, but with practice it can certainly help reduce urine loss.

## **NONSURGICAL TREATMENT OPTIONS**

### **Pelvic Floor Rehabilitation Therapy:**

#### **1. Biofeedback**

Some women have trouble identifying and contracting their pelvic floor muscles. Some women squeeze their rear-end muscles or thighs; some women actually push down with their abdominal muscles. The pelvic muscles are the muscles one would squeeze if she were trying to stop urine or gas from coming out (but please, do not practice while you are emptying your bladder). Some women need to be taught how to perform these correctly. Biofeedback is a program designed to help a woman correctly identify and isolate the proper pelvic muscles. Using, for instance, a vaginal probe and skin surface muscle electrodes (small sticky patches that are placed on the skin overlying the abdominal muscles and/or the buttock muscles), a woman may actually visualize on a computer screen the activity of the muscle she is contracting. She learns when she is exercising the proper muscle and when she is squeezing the wrong muscle.

#### **2. Electrical Stimulation Therapy**

Sometimes the pelvic floor muscles cannot adequately contract due to nerve damage (multiple vaginal births, delivering large babies, previous pelvic surgery). Electrical stimulation is similar to biofeedback with the exception that a gentle electric current is used that directly acts on the pelvic floor muscles, causing them to contract. This helps to "bypass" the activity of the damaged nerve. The use of electrical stimulation has been shown to significantly reduce episodes of urge incontinence. There are specific nerves that rest in the pelvic muscles that, when stimulated, cause the bladder muscle to relax. This therapy helps prevent bladder spasms and has been shown to be quite effective.

#### **3. Extracorporeal Magnetic Innervation ("Magnetic Chair")**

This is a painless, noninvasive therapy that strongly contracts the pelvic floor muscles through a magnetic field that is generated. One sits on the chair, fully clothed, for approximately 25 minutes, twice weekly.

### **Medications:**

Medications can help with symptoms of both stress and urge incontinence. There are a number of medications that act to relax the bladder muscle and prevent spasms (examples: oxybutynin, hyoscyamine, Detrol, Ditropan XL). They are relatively easy to take with few side effects, the

most common one being dry mouth. These medications should not be taken if you have NARROW angle glaucoma; if you have OPEN angle glaucoma, it is safe to take these medications.

Other medications help to increase the muscle tone around the urethra (the tube that brings the urine from the bladder to the outside). Imipramine is an example of these medications.

Local vaginal estrogen cream also increases the function of the urethra and reduces urinary urgency and frequency.

### **Vaginal Support Devices:**

Vaginal support devices can be used in an attempt to "resupport" the bladder. A vaginal support device or "pessary" is a specially designed soft plastic device (similar to a contraceptive diaphragm) that supports the bladder and the "bladder neck." Use of this device prevents urine leakage during activity. Another option is to wear a "super" tampon, which temporarily compresses the urethra, helping to prevent urine leakage.

## **SURGICAL TREATMENT OPTIONS**

***Before a woman has surgery for incontinence, an accurate diagnosis as to the cause of the incontinence should be made.***

Your physician needs to know if the cause of your urinary incontinence is due to loss of support to the bladder, if the sphincter muscle in the urethra is functioning properly, and whether or not you have bladder spasms. Bladder testing (called "urodynamics") helps determine the cause. Surgical treatment is reserved for stress urinary incontinence. Urge incontinence (bladder spasms) is generally not treated surgically. If a woman has mixed incontinence (BOTH stress and urge incontinence), surgery will treat her stress incontinence but will not necessarily address her urge incontinence. Therefore, she must understand that she may need to continue taking medications in the future to treat her urge incontinence

Surgery may be performed either through the vagina or through an abdominal incision with varying success rates. Surgeons who have published studies have determined the following success rates:

- Vaginal bladder repair ("anterior repair" or "bladder lift/tuck"): 60 - 70% cure rate
- Combined vaginal/abdominal repair ("needle suspension"): 70 - 80% cure rate
- Abdominal bladder suspension ("Burch" or "MMK"): 80 - 90% cure rate
- Sling procedure (combined vaginal/abdominal): 90% cure rate

**Please note:** These procedures may be done for different reasons. The cure rate may be low for a particular procedure not because it does not work, but because it was not addressing the problem correctly. Also, different surgeons have different techniques and skills that may make one procedure more effective in his/her hands.

What is most important is to discuss this with your physician. Your physician will try to do his/her best to help you, but do not be shy about asking questions.

1. If you have loss of *support to the bladder* associated with urinary incontinence but your *sphincter muscle is working appropriately*, you are a good candidate for an abdominal suspension (such as Burch procedure). This procedure is done through a horizontal skin incision (bikini line) and places stitches on both sides of the urethra. These stitches are then attached to a strong ligament that lays on the pubic bone, thus resupporting the bladder or lifting it back up to a more normal position.

Sometimes this procedure can be done through the laparoscope (an instrument that is like a telescope, inserted near the navel, and surgery is done through small incisions).

2. If you have loss of *support to the bladder* AND your *sphincter muscle is weakened*, then you are a good candidate for a sling procedure. This procedure either uses a permanent piece of material called a "mesh," or a piece of your body's tissue called "fascia" to make up the sling. The sling is then passed underneath the bladder and urethra and back up to the abdomen, where it is attached to the abdominal muscles. When you cough, lift, or laugh, the sling pulls up and helps to "resupport" and CLOSE the weakened sphincter muscle, thus preventing urine leakage. Approximately 15% of women will develop "bladder spasms" or difficulty emptying their bladder (slow stream, incomplete bladder emptying) after this type of surgery.

Depending on your situation, you may be a candidate for a minimally invasive type of sling procedure called a "tension free vaginal tape," which allows for a more rapid recovery and less postoperative voiding problems.

3. If the support to *your bladder is normal* but your *sphincter muscle is weak*, then you are a good candidate for a procedure called "collagen injections." This is an outpatient (same day) procedure done under local anesthesia. It does not take long (15 - 25 minutes), and the woman can resume her normal activities the next day. A pasty substance called "collagen" (similar to what is used in cosmetic surgery to bulk up the lips and reduce facial wrinkles) is injected into the part of the urethra where the weakened sphincter muscle is. It "bulks up" this area and helps "close it." (A very uncommon risk is that a woman is not able to empty her bladder, but this is only temporary.) Since collagen is not permanent and does dissolve, women usually need this procedure done more than once. It is not ideal for young, active women since it is not long lasting.
4. If your bladder has lost its support but you only have very minimal incontinence, you may be a candidate for a vaginal bladder repair ("anterior repair"). But remember - if your bladder has dropped significantly you may not be leaking much urine because the urethra is "kinked." This needs to be evaluated first, because this may require a different procedure.

Most importantly, if surgery is planned, make sure you have appropriate bladder testing done before surgery to ensure that the proper procedure is being done for the proper reason.