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1 The Growing Subspecialty of Female Pelvic Medicine and Reconstructive Surgery

1 Menstruation in Adolescents: A Sign of Physical and Psychological Health

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The Growing Subspecialty of Female Pelvic Medicine and Reconstructive Surgery

Studies have shown that 20 percent of women in the United States by the age of 80 will require some form of urogynecologic surgery for pelvic organ prolapse or incontinence, and a third may require a repeat surgery. The prevalence of these common and troublesome conditions, which affect one-third of premenopausal women and up to 45 percent of postmenopausal women, led the American Board of Medical Specialties in 2012 to identify Female Pelvic Medicine and Reconstructive Surgery as a subspecialty in obstetrics and gynecology. Its name more accurately describes the scope of diagnosis and treatment of female pelvic support disorders and further recognizes the growing importance of this discipline.

Pelvic floor disorders can occur in women of all ages and, unfortunately, many women hide their symptoms because they are not aware that urinary incontinence and prolapse can be treated effectively. “Given the aging of our population, complaints related to pelvic floor disorders are increasing,” says Tirsit S. Asfaw, MD, a urogynecologist in Female Pelvic Medicine and Pelvic Reconstructive Surgery, Department of Obstetrics and Gynecology, at New York Presbyterian/Weill Cornell Medical Center. “However, women do not need to ‘learn to live with’ these conditions since a range of treatment options are available through urogynecologists.”

“Ten percent of women who have had children are going to develop some sort of problem with either urinary incontinence or prolapse of their pelvic organs,” says Carmen J. Sultana, MD, Chief of the Department of Obstetrics and Gynecology at New York Presbyterian/Lower Manhattan Hospital. “It’s important when treating patients with pelvic floor disorders to identify exactly what the problem is and

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Dr. Tirsit S. Asfaw

Menstruation in Adolescents: A Sign of Physical and Psychological Health

The ability of a clinician to differentiate between what is normal and what is abnormal menstruation is critical in assessing a young woman’s general health and well-being. “A normal initiation of menses followed by regular predictable menstrual cycles is a sign that everything seems to be in working order and there are no significant stressors that could be affecting a young woman’s reproductive system,” says Beth W. Rackow, MD, Director of Pediatric and Adolescent Gynecology, New York Presbyterian/Morgan Stanley Children’s Hospital. “However, a woman’s reproductive system is

uniquely susceptible in times of stress, which can include weight loss, malnutrition, crisis, severe chronic disease, and so on. Menstruation is one of the first things that actually might shut down. So if we don’t pay close attention to a girl’s pubertal initiation, her onset of menarche, and how regularly her cycles occur, we could be missing something.”

The American Congress of Obstetricians and Gynecologists Committee on Adolescent Health Care and the American Academy of Pediatrics have issued an opinion paper on the use of

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to understand how the issues of urinary incontinence and prolapse work together. For example, if you just look narrowly at the bladder, you're going to miss the rest of the story, which is the entire pelvic floor."

The symptoms of pelvic floor disorders range in type and severity, including urinary retention or frequency, nocturia, vaginal wall prolapse, fecal incontinence, recurrent urinary tract infections, pelvic floor or bladder pain, and pain with intercourse. Modes of treatment include pessary use, robotic, abdominal, and vaginal reconstructive surgery, as well as medical and surgical treatment for urinary incontinence.

Says Dr. Asfaw, the availability of information on female pelvic disorders through the Internet has led to more informed patients. "That is both good and bad," she says. "On the one hand, patients come in with some idea of what they have, however, it does not always turn out to be the case. And also at times they get a lot of inaccurate information. They may want a treatment that they don't need, or they actually need a treatment that they feel isn't necessary. We spend a lot of time sorting all of that out. It's a big quality of life issue."

Approaches for surgical repair of pelvic organ prolapse incorporate the traditional transvaginal suture repair, including anterior and posterior colporrhaphy and suspension of the vaginal apex. However, the high failure rate of vaginal repairs has led to the use of graft interposition via an abdominal or vaginal approach. Laparoscopy, including more recently, robotic assisted sacrocolpopexy, has provided a minimally invasive option.

Dr. Asfaw, who is trained in abdominal, vaginal, and robotic surgery, advocates for conservative approaches first. "Not every woman needs surgery and each approach is unique to that person and their condition," says Dr. Asfaw. "Together we come to an agreement about the patient's long-term and short-term expectations, as well as what the risks and benefits are with each procedure. Surgery may be an option for most patients. If we try everything else before we go to surgery, at least we've exhausted every conservative option."

Dr. Sultana agrees. "You need to do a review of all of the medical, surgical, and



Dr. Carmen J. Sultana

behavioral options that are available for incontinence and related conditions. We want them to understand that there are subspecialists in this area and that there are newer treatments coming out all of the time."

Some patients have been dissuaded due to negative press about surgical repairs, such as the vaginal mesh. "There's a lot of confusion among patients. There's mesh and then there's mesh," notes Dr. Sultana. "For example, many patients have turned away from treatments that could help them because they are confusing the procedure for incontinence with some of these other procedures that use more mesh. The vaginal prolapse repair with mesh is a different procedure than the mesh that we use to fix incontinence. Mesh hasn't been taken off of the market, and there are many different ways to correct vaginal prolapse issues. It's really about consenting patients and ensuring they understand the risks and benefits."

"Often patients will delay seeking help, thinking that they can't be helped or have been told by another provider that their only choice is surgery. They don't know that sometimes simple conservative management and observation can be a treatment," says Dr. Asfaw. "The truth is that surgery is not always 100 percent effective. There is a risk with each modality. So I spend my time counseling patients on the available treatments. Some are relieved to hear that they can also use a pessary."

Understanding a New Subspecialty

Drs. Asfaw and Sultana agree that getting the message out among general practitioners and gynecologists of the establishment of the Female Pelvic Medicine and Reconstructive Surgery subspecialty is important.

"After 25 some-odd years, it has finally been recognized as its own subspecialty in OB/Gyn," says Dr. Sultana, who trained as a urogynecologist and completed a fellowship in pelvic surgery. According to Dr. Sultana, female pelvic medicine and reconstructive surgery has joined the ranks of maternal-fetal medicine, reproductive endocrinology and infertility, and gynecological oncology with specific fellowship accreditation. "The new name reflects that what we do in urogynecology encompasses more than surgery."

"There is a lot of medicine involved with what we do," adds Dr. Asfaw. "We address all of the female patient's issues, including problems with intercourse, issues with intimacy, leakage of urine, and depression."

Dr. Asfaw notes that women, as primary caregivers, often neglect their own needs. "Women are so busy taking care of everybody else that they put these problems last," she says. "We understand the path she's been on, the effects that childbirth have had on her. We also understand the intimacy problems she might be having with her partner. We try to put things in perspective and draw on specialists in other disciplines as necessary."

Since urogynecologic problems are among the most common conditions that women face, both doctors emphasize that gynecologists and primary care physicians should be asking certain questions during routine examinations. "Find out if they have any problems with incontinence," says Dr. Asfaw. "If they give you a little information, keep asking more because there are a lot of things that we can do. If they tell you that they're not exercising anymore, ask why. It may not be that they're tired; it may be that they're embarrassed about urine leakage, or they're afraid that their bladder is going to hit the floor. We screen for heart disease and cervical cancer; we should also screen for incontinence, prolapse, and other recurrent genitourinary issues that can make a big change in a woman's life."

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menstruation as an additional vital sign in girls and adolescents. The report noted that just as abnormal blood pressure, heart rate, or respiratory rate may be key to the diagnosis of potentially serious health conditions, identifying abnormal menstrual patterns through adolescence could lead to the early identification of possible health concerns for adulthood.

The report also comments that young patients and their parents frequently have difficulty assessing what constitutes normal menstrual cycles or patterns of bleeding. Girls may be unfamiliar with what is normal and may not inform their parents about menstrual irregularities, missed or heavy menses. Some girls will seek medical attention for cycle variations that actually fall within the normal range. Others are unaware that their bleeding patterns are abnormal and may be attributable to significant underlying medical issues that could have the potential for long-term health consequences.

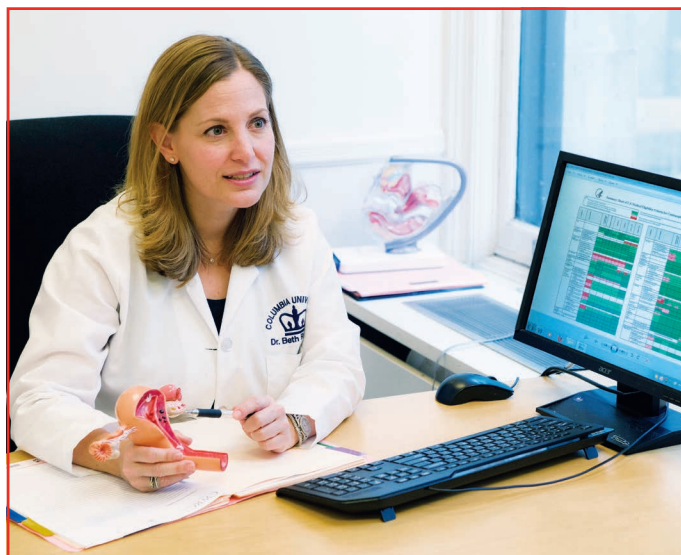
Cause and Effects

“Most girls should have started breast development by age 13 and have their first period by age 15,” says Dr. Rackow. “That is typical in America. But we also need to be culturally and geographically sensitive because we are an immigrant nation and women from other parts of the world don’t necessarily have the same timeline.”

The American Congress of Obstetricians and Gynecologists and the American Academy of Pediatrics concur that menstruation is an additional vital sign for adolescent girls.

If a girl has developed breasts, but it has been three years and she still hasn’t had her first period, says Dr. Rackow, that is a flag that something is wrong. “Also, after their first period, about 90 percent of young women continue to menstruate every 21 to 45 days thereafter,” she says. “A number of medical conditions can cause irregular or missed menses. However, it is very uncommon if an adolescent remains amenorrheic for more than three months, even just once. There can be many causes, from hormone disorders and genetic disorders to primary ovarian insufficiency, to extremes of behavior, including disordered eating and over-exercising. Significant psychological stressors, such as issues with friends or being bullied at school, can also be factors. Additionally, I’ve seen girls age 17-18 who have never menstruated, and they have not been evaluated for primary amenorrhea. In some of these young women, structural abnormalities of the reproductive tract can be the cause of primary amenorrhea.”

Thus, says Dr. Rackow, clinicians should consider evaluating a patient after the absence of menses for 90 days or if menstruation has not occurred by three years after the start of breast development. In addition to ruling out a pathological condition, it is also important to ensure that the adolescent does not experience a prolonged interruption of estrogen production. “Women’s bodies are meant to be exposed to estrogen until the appropriate time of menopause in their late 40s or early 50s,”



Dr. Beth W. Rackow

says Dr. Rackow. “The biggest concerns for these girls are identifying the cause of abnormal menstruation, and if their ovaries are not making sufficient estrogen, there may be implications for bone health since more than half of bone development occurs during adolescence. Thus it is essential to attempt to diagnose the etiology of the abnormal menstruation and to help the patient attain a normal hormone profile.

“Our intervention, if necessary, can be something as simple as a birth control pill for hormone stabilization, and providing estrogen and progestin will give them a period every month,” continues Dr. Rackow. “Sometimes, we can’t keep waiting for the reproductive system to function normally, so we may start hormone treatment to aid with overall health and bone development as well.”

According to Dr. Rackow, “These girls may also face psychologic distress due to abnormal menstruation and are concerned that they are not ‘normal.’ This may begin to affect their self image.

“There are key indicators in the big picture of a girl’s pubertal and menstruation history,” adds Dr. Rackow. “Clinicians need to keep an eye on the timing and tempo of the process, and to recognize that it is not normal to have delayed menarche or abnormal menstruation. In taking good overall care of adolescent females, I think having a higher index of suspicion for problems and using the menstrual cycle to assess overall health is very important.”

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“Ninety percent of people with incontinence can be treated, if not downright cured,” says Dr. Sultana. “They have options. As urogynecologists, we can help.”

As the population continues to age, Drs. Asfaw and Sultana believe that the field of female pelvic medicine and reconstructive surgery will also expand. “Nationally there is a big effort to establish more accredited fellowship sites, with the goal of training more physicians in this subspecialty,” says Dr. Asfaw. “It is clear that we will not be able to meet the needs of the aging female population without more practitioners in this subspecialty.”

The Role of Research

At Weill Cornell, studies are underway in both basic science and clinic research. “My interest is pelvic organ cross-sensitization,” says Dr. Asfaw. “A lot of patients have pelvic pain – it may be coming from the bladder, vagina, the bowel, or uterus. In the past, patients just lived with the pain, essentially. But we now understand that the nerves talk. The nerves of the bladder talk with the nerves of the colon, the uterus, and the nerves in the pelvic area. When one area is inflamed, for whatever reason, by the time the message gets to the brain the brain doesn’t know where the message is coming from. It sends inflammatory mediators to everything.”

Clinical research projects are looking at why changes occur in the pelvic floor, for example, during pregnancy. “Understanding normal and abnormal physiology, and how anatomy can be affected

in labor and delivery, and then trying to predict consequences for the pelvic floor a few months down – I think that’s something that’s hugely overlooked,” says Dr. Asfaw. “A great deal of research needs to be done in this area.”

“We know that there has to be some genetic component to prolapse,” adds Dr. Sultana. “You can’t correlate the number of babies that someone has had with whether or not they’re going to develop this problem. Patients who have certain collagen deficiencies or neurologic issues are more likely to get prolapse. But there are other factors that are not well understood, such as how people differ genetically, that may predispose them to these conditions.”

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