

Internal Medicine Coding Alert

Master the Female Anatomy for Higher Ob-Gyn Pay-up

Presented by: Melanie Witt, RN, CPC, MA

The following supplement to Radiology Coding Alert is the transcript of a teleconference presented by The Coding Institute. To obtain the slides for the conference, please log on to our Online Subscription System at <http://codinginstitute.com/login> and download open the PDF version of the current issue, and the slides will be contained therein. If you're not sure how to use the Online Subscription System or need help downloading opening the issue, please contact our customer service department at 1-800-508-2582 or service@medville.com, and one of our representatives will be able to assist you.

The speaker for the teleconference, Melanie Witt, RN, CPC, MA an independent coding education consultant, is a well-known speaker and recognized expert in the area of coding and reimbursement for ob-gyn services. She is the former program manager of the Department of Coding and Nomenclature and American College of Obstetricians and Gynecologists. Ms. Witt is also the consulting editor for [Ob-Gyn Coding Alert](#).

Thank you Mandy. Good morning everyone. I understand we have a fairly small group today which is actually a good thing because it may give you guys a little bit more time to ask questions at the end than we would normally have time for when we have lots of people in attendance.

The lecture today is predominantly about female anatomy. I am not going to talk about the bladder in particular, because that is another structure that is more related to the urology side. And I am sticking strictly in this case with the genital structures of the female anatomy and we are going to talk about the anatomic structures and a little bit about the physiology of how it works, why it works and why it is there. And then I am going to cover some terminology as well.

Now when we talk about anatomy and physiology, it is one of those subjects that everybody says well I have to take a full course for, and gee, it is so boring, and why do I need to know about all the veins and things like this. In truth, unless you are going to become a doctor or you are going to start doing surgical procedures, you do not need to know the in-depth information about where the wounds and nodes are located and which ligaments are here and what veins come out of this part of the body and exactly what color the organ is, and those kinds of things.

However, as a coder and biller, you need to have a basic understanding of these structures because your physicians are going to describe things that they do to these structures. Sometimes, and it frequently happens, those CPT codes or even the ICD-9 codes are not descriptive enough for you to pinpoint, am I using the right code? Is this a correct linkage for this? Where in the body is this supposed to be? So sometimes looking at pictures and getting a little background information about what is going on with the body is actually extremely helpful to you as a coder when you are faced with these kinds of situations. Now the presentation cannot be just anatomy and physiology because what good is that going to do if we don't also address some of the issues that are attendant with coding problems that we may have. Now in an hour and a half it will be impossible to cover all of the codes in the book of the female genital system and go over each one, so that will be left for a later time for a different conference and for a different purpose. But what I can do in this conference is highlight some of the problem areas that I have most frequently from coders: well gosh, they did this after they did this and how the heck would you code for that? So that is how I am going to concentrate this presentation. The information is already in your handout. It is in an outlined form and you probably do not need to take any extensive notes. But when I begin to talk about the coding, you might want to flip that page over and be prepared to jot down some notes. And that part of the lecture will be a little bit slower so we can cover it in a little more detail.

On the first page, I give you a listing of my favorite resources and this is an important thing for coders to have. It is not the end-all, be-all by any means, but I found over the years that these have helped me along the way, particularly

understanding operative reports when they are very complex. And the first listing that you will see says 'images'. Now I discovered www.google.com years ago when they first started up and I have used it a lot because I think they are less into the commercial side. I guess they cover more the research side of things that I am looking for. And one of the sites there is an 'images' box that you can click on and you can type in anything, like you could type in uterus, and it will show you and pull off the internet any sites that show a picture of the uterus in some form or fashion. Now some of them unfortunately you get hits on other sites that are not related to anatomy and physiology so much as pornography, those will still show up in that box. But in general you will get a picture, an image and you will click on that and it will take you to the Web site page and the Web site page itself may have a lot of definitive information about the uterus, if that is what you are looking at, or the ovaries. Or you could type in 'uterosacral ligament' and you might find actual surgical pictures of that ligament in the body and doing some surgery on it. So it is a very nifty little source when you are in doubt about what the surgeon actually did. Then there is a series of textbooks that I recommend. This is above and beyond your coding books. This would be basically for people who are doing a lot of surgical coding and the first one is called Operative Gynecology. It is an excellent book. It has extremely well done illustrations of the basic surgeries and very good description of what they do, what's attached where and why and when, where the retractors go. You can actually get a visualization so that if you see an operative report you can go, oh! that's what they are doing when they say they did that. And it will give you a better feel for what is actually included in the surgical procedure.

The next one is an old one for me. I have had it for years and years and years, but there are different editions and it is called Current Obstetric and Gynecologic Diagnosis and Treatment. It is kind of a generalized book. It has information about anatomy and physiology. It has information about different types of surgeries. It has a whole section on obstetrics, so that you could find out all kinds of things on what can go wrong with OB and a section on cancer surgery, etc. So it is a useful source and it is in a language that is fairly easy to understand. And then the third, which is one that just came out by the AMA, is called Netter's Atlas of Human Anatomy and CPT Coding, Celeste Kirschner, who was heading up the CPT Group at the AMA for years and years and years and retired a couple of years ago, actually worked on this book with the AMA. Dr. Netter is extremely famous for his illustrations. They are extremely colorful, they are extremely detailed and if you really want to know what the inside of your body really look like he would be the guy that you would go to, to look at these pictures. He has been deceased for quite a number of years but his pictures are still used today. What is unique about this book, which I just purchased and received a couple of weeks ago is that it gives you the anatomy and then it connects it with CPT codes, so that you can see the gamut of CPT codes that would be related to the area of body that is depicted in the picture. So it may not give you every detail you ever wanted to know but it certainly is, I think, well worth the money getting it, it is a book that I think was very well put together.

So we are going to start the lecture talking about the external genitalia and you can see in diagram #1, this lovely spread out picture and you can see where the labels are and the little lines that point to things. And I am going to go over each one of these, or pretty much of each of these individually. First thing you need to know that the term vulva and the term external genitalia are interchangeable. They are basically the same thing, and the vulva actually surrounds that vaginal opening. So it all those structures that are around there. And if you will notice at the bottom of the list I have also listed the perineum. The perineum is not actually indicated on this particular diagram, but it will be indicated on diagram #2 when we get to that point. So what are the structures? Well the first structure to mention is called the vestibule. This is going to be the area that is between the labia minora and the vagina. It extends from the clitoris at the top down to the posterior fourchette, which is at the bottom, and inside that vestibule, there is going to be an opening into the vagina. There is also an opening into the urethra called the urethral meatus, and then there are some ducts that are located there, the ducts being the openings into glands, and those would be the major vestibular glands that is also known as the Bartholin's gland, and then there are a bunch of minor vestibular glands.

Now part of the vestibule between the vaginal opening and the frenulum part of the labia minora forms a very shallow depression and that is called the vestibular fossa. You probably are not going to ever have to know what that is but it is nice to know where these things are going to be located in the outside part of the body. The skin of the vestibule is primarily what we call endodermal, in other words like regular skin. It is covered by stratified squamous epithelium and then it has a thin keratin layer beyond Hart's line and you will see Hart's line on the diagram. It is not necessarily something that you need to know for surgery. Surgeons do not usually refer to it, but it just describes where anatomically in the body the keratin layer starts and then on the other side it is not keratin layered. The structures in and around the vestibule then would be the Bartholin's gland and then of course also the periurethral Skene's glands. Now the reason you need to know about that the Skene's glands, which are indicated on this diagram at the very top,

just below the clitoris, is because sometimes the surgeon will say he has removed a periurethral cyst, and so that is why that is important to know, but we will talk about those Skene's glands and their purpose in a few minutes.

The next structure you need to know about is the hymen. This is a thin and incomplete membrane of connective tissue and it is at the junction of the vestibule of the vagina. It goes from the perineum up and it then leaves a small opening, and the purpose of the opening is to allow menstrual blood to flow through. If you regularly use tampons or you had sexual intercourse, that will actually reduce the size of the hymen tissue. You will get a lot of series of these little regular tags around the vaginal opening and basically it will be obliterated. The most common shape of the hymen is that of about a half moon and again it allows menstrual blood to flow out of the vagina, but there could be other shapes as well. Sometimes you will see a picture of a hymen that has holes in it, this would not necessarily be a normal one because a lot of menstrual blood could not flow through that way. Sometimes you will find an imperforate hymen, which means the entire vaginal orifice is closed with this membrane, so no blood goes through, sometimes the hole is on the side with a thick band in the middle and so the blood flows along either side but again that is not the normal opening. So it can come in any form or fashion basically. And usually again, once you have had sexual intercourse then it is gone. And of course when it does get ripped or torn it will bleed because it is attached to the perineum structures. I think that is probably enough to be said about the hymen.

The next structure is the urethra. The urethra leads directly to the bladder and it is a canal about 4 cm long, it follows closely to the front wall of the vagina and it kind of parallels the vagina as it goes up. It opens into the vestibule and then it is located just below the clitoris, just above the opening of the vaginal orifice. Then we have Skene's glands. Now the Skene's glands are located at the very end of the urethra or they can be just inside the urethral meatus. They are about 0.5 to 1.5 cm long and they have lots of mucous glands in the wall and one of the reasons that they are there is to secrete mucous, etc., during sexual activity.

The Skene's glands can also be referred to as paraurethral glands or periurethral glands and frequently in a report when the surgeon is saying I did an I&D of the periurethral cyst, this is what they are talking about is an area of the Skene's glands. You will notice that I gave you some diagnostic and CPT coding information for the Skene's glands and the reason I did so in this particular instance as part of your handout is because the Skene's glands coding is not found in the GYN section of the CPT book, or the diagnostic coding is not in the female genitalia section of the ICD-9 book. So for instance, if the physician was draining an abscess or a cyst of the Skene's glands, the code you are going to use is 53060, you are going to link it to the diagnostic code, as to whether or not it was a cyst or an abscess and the code changes; so if it were a cyst it will be 599.89 and if it was an abscess, it would be 597.0.

Also for those of you who may or may not be interested, if you remember a few years back the articles that came out about the famous G-spot, well the G-spot is supposed to be located right around the Skene's glands. Just a little piece of history I thought I'd pass on.

This brings us to the Bartholin's gland ducts. The ducts of course lead to the Bartholin's glands and these are found on the right and left side of the bottom part of the vestibule. Each one of these ducts is lined with something they call transitional epithelium, and the glands themselves are located deep inside the back part of the labia majora. They are beside a huge muscle and they are just below it, and the purpose of the glands is to produce clear secretions which are most noticeable during sexual activity. In fact if we thought about it, the entire vulvar area inside the labia minora in particular and around the opening of the vestibule, there are tons of little tiny glands in there all over the place, and all of those are secretors and it is what keeps everything lubricated. So if anything can go wrong in that area, it will tend to be a cyst of some kind. The labia majora are the outside vaginal lips. They are also sometimes called the labium majus and they form the outside boundaries of the vulva itself. They are composed of folds of subcutaneous fat and fibrous tissue. At the very top they fuse together into the mons pubis, which is the top part and below they terminate just above the anus, but before you get to the perineum area. And where they terminate, where they unite is called fourchette of the labia. The labia minora are the inside lips and they are sometimes referred to as the labium minus. These are thin folds of hairless skin and they are exactly either side of the vaginal orifice and the urethra is located within those folds of skin. It is smooth and pigmented and mainly is composed of elastic fibers and blood vessels, but it has very little fat tissue at all. One of the big problems with the labia minora is that frequently there will be maybe an excess of tissue in that area which has to be excised and we will talk about how we will go about coding that in a minute. At the very top of the labia minora, you get two skin folds that split and enclose the clitoris. You have two that go on top and those form

something called the prepuce, which covers the clitoris body and then you have uniting below that which forms what they call the frenulum of the labia minora or the posterior fourchette. Although it is not really shown in this diagram, as I said they are also anywhere between 1 to more than 100 minor vestibular glands that are located around that posterior fourchette, all of these secrete and all of these are potential sources for clogging and cyst development and things like that. Now the clitoris, which is right at the top, below the prepuce, below the mons, is made up of erectile tissue and it is the equivalent of the male penis because it is erectile. When you have sexual arousal it actually elongates and swells. It has a lot of blood supply, extensive nerve supply and so it is an important thing for most women to know about for that reason, for its purpose. Not too many things can happen to the clitoris unless deliberately done by man; in other words, the clitoris has been for many cultures the source of all sexual activity in woman. The thought has been, if we somehow do something to prevent her from feeling any sexual pleasure then she would not stray. Therefore, a lot of the surgeries that are done in third world countries involve doing something to the clitoris to actually obliterate it.

And this finally then leads us to the mons, which is the simplest vulvar structure. It is at the very top, it is composed of hair-bearing skin. There is a lot of fat-pad there and it actually is used as a shock absorber for the symphysis pubis or pubic bone as it is frequently called. And it is a shock absorber basically for sexual activity.

Then we are going to go down to and talk about the perineum. Now the perineum is in some textbooks that you might look at is categorized as part of the vulva while in others they talk about it as a separate structure. In general, this distinction just is not very important, but we should go over what lies within the structure of the perineum because this is the part of the body that is going to be affected for instance in the passage of the baby. When a physician has to cut that area to create an episiotomy so that it will not tear, this would be the area that would tear if an episiotomy had not been performed. When we are dealing with codes for repairing a laceration of that area, this is the area that we are talking about and you can see this area in diagram #2. The diagram actually depicts the underlying structures rather than the skin overlying it, but if you will see to the left-hand side the second one up just above the label for anus, it says perineum. That is the skin area, so it is between the bottom of the vulva, to the top of the anus, it is that strip of skin in there, that is the perineal area. This area also is endowed with a lot of nerve endings and blood vessels, etc., so it is also very elastic because this is the area that has to try to expand and it can expand to some point during passage of baby's head but not all that much. But the muscles that are around there are the structures that are going to hold up everything in the inside basically and so, it is the foundation for the pelvic organs. There are all kinds of muscles in there and the biggest ones will be discussed in some detail. But basically you have got the external anal sphincter, which has a muscle set of its own which makes it operate. You have something called the superficial transverse perineal muscle. The superficial muscle is shown on your diagram, but below that muscle is the deep transverse perineal muscles, so you actually have two sets. You have the ischiocavernosus muscle and the bulbocavernosus muscle sometimes called the bulbospongiosus. Then you have the sphincter urethrae muscle as well. So all of these muscles are situated around the outside of the body underneath the skin layer as your basic support for the perineal structures.

Now that bulbocavernosus muscle starts at the back of the perineum, which is also called the perineal body and I will talk about that in a minute. And there is one muscle on each side of the vulva. Each one rises up and wraps around the vagina and then ends in about three places located right around the clitoris. The muscles themselves act as a weak sphincter for the vagina and it helps to resist the prolapse of the pelvic viscera. This muscle also surrounds and compresses the Bartholin's glands and this will especially be true when the vestibular bulb is beginning to form an erection due to sexual activity. On the diagram you can see that the vestibular bulb itself is located on either side of the vagina.

Ischiocavernosus muscle, this is one of those muscles that make up what they call the urogenital triangle. This triangle is in area that includes the opening of the urethra and into the vagina. So just think of a triangular shape. This is one of the muscles that is important to that triangle. It starts in an area called the ischiopubic ramus. On your diagram, it would be the area to the far left and right of the superficial transverse muscle that you see listed there. It is actually part of the pelvic bone. It then also inserts into the body of the clitoris and the purpose of this muscle is to compress the deep structure of the clitoris to increase the blood supply. Again, it would be related to sexual activity. Then you have the superficial transverse perineal muscle, it also starts at ischiopubic ramus that I talked about and it inserts into the perineal body, and the perineal body is right below the surface in the perineum. Its job is to resist increased intrapelvic pressure. It draws back and fixes that central tendon with the perineal body into place, so the pressure does not cause things to prolapse. If you thought of putting your hand against someone who is pushing against you it pushes back--that

is how it acts.

Now the perineal body is something that is referred to in a lot of operative reports, frequently it is going to be mentioned when they are doing a repair of the perineum or the posterior wall of the vagina. This is really just a fibromuscular mass and it is located on your diagram, as I said, below the labeled skin portion of the perineum. This is the insertion point of that bulbocavernosus and muscle along with the external anal sphincter and the superficial and the deep perineal muscles. When a midline episiotomy is done it will usually extend right into this structure, so it would need to be repaired.

What can happen to the vulva and the perineum that we need to know where all of these things are, conditions in the vulva and the perineum: you could have skin infection, could have ulceration in the skin, you could have problems with pigmentation of the skin, you could have psoriasis going on, you could have varicose veins, edema, hematomas, just about anything you want to name. Herpes can be there, condyloma can appear here and in general there are codes in the CPT book that can handle a lot of these, but some of the problem areas are having to do with cysts.

Now remember what we are talking about is an area that is exterior. Because it is exterior it can also substitute for skin or the external genitalia area, which are covered in some of the codes that you will find in an integumentary system. But CPT's rules generally indicate that if there is a more specific code for the thing that you are going to do, you will need to pick the most specific code. So let us do a real quick review to see what kinds of surgeries could be done and what your options might be. The first one that comes to mind would be the excision of excess labial tissue. This is a frequent thing whether the patient feels like it is interfering with intercourse or it is painful or for some reason thinks it looks unsightly and she wants it removed. You are not going to find that code in the female genital section of the CPT book unless you were talking about adhesions. If you are talking about excessive skin, you are going to go to the integumentary system and you are going to look for code 15839, excision of excessive skin, other area. Another thing that can happen is that you form cysts. There are different codes for cyst aspiration. There is a fine needle aspiration, which could be done if you are aspirating material to obtain a biopsy, but there is also a puncture aspiration of a cyst and if it is on the vulva anywhere, the code could be 10160. If you are going to incise or drain a cyst you can take work at 10060 as a possible code. The 10060 would be if it were a cyst, but then you would go back to the CPT chapter for the female genital surgery part of it and look at 56405. If it were something other than a cyst for instance a labial abscess, something in the skin. So 56405 is for an I&D of an abscess in the area of the vulva or the perineum but not necessarily a cyst. The cyst would be more specific to 10060. You could have a hematoma on the vulva. If you are going to aspirate the hematoma with a needle to pull out the blood, it would be 10160, again you are in the integumentary system. If you are going to do an incision and drainage of that hematoma anywhere on the vulva, it would be 10140, again you are in the integumentary system. If you are going to destroy lesions that are located on the vulva and if you are going to destroy them using laser, chemicals, cold or heat, you are going to go to the GYN section of CPT and you are going to look at 56501 and 56515 those two are for destruction of lesions. If you are going to biopsy any area on the vulva, you are going to go to the biopsy codes, these are found in the female genital section: 56605 would be the starting point on that code. Now, what if you are going to excise a lesion? If you are going to excise a lesion and you are not biopsying it instead, you are going to go back to the integumentary system again and now you are going to have two sets of codes that you can work with. One is if the lesion is benign and the only way you are going to know that is to weight for the path report, and that would be 11420 to 11426. If it were malignant, the codes would be 11620 to 11626. In order to bill these codes, what do you need? You need to know the site of the lesion and when the lesion is removed here, you are also going to be doing some surgical margins. In general, the difference between a biopsy and removal of the lesion is that the lesion will generally remove not just the lesion but some of the surgical margins around it; whereas the biopsy will be a part of a lesion or they might even scoop-up the whole lesion but they are not taking surgical margins. You might want to think about that when you are looking at your description.

Then of course there are codes in the book that have to do with the hymen. Again, those are found in the female genital system surgery codes and you can do two things to it. You can remove it or you can punch a hole in it. There is a code for either one. As far as the Bartholin's glands or cysts are concerned, if you take them out, there is a code for that that is 56740. If you do an incision and drainage, there is a code for that and if you then do a marsupialization of that gland then there is another code for that. Marsupialization is basically taking a fold and inverting it inside-out so that the cyst can not form anymore. Then still in the vulvar area we have codes for removal of tissue. In other words, vulvectomy codes. Now the vulvectomy codes are not for removing individual lesions, instead they would be used for disseminated

problems of the vulvar area of the perineum where you are taking sections of skin and subcutaneous tissue and fat, and you are removing that and then you are suturing it back together. That is what the vulvectomy codes are all about. So that is just a quick review of what could go on there.

In the next illustration, which is diagram #3, and I have started this as 'terms that confuse.' In other words, we have already discussed that the external genitalia and the vulva are identical and that the vestibule and the introitus are identical terms. They are used interchangeably. One is not any different than any other, but there is a difference between the perineum and the peritoneum. Now if you have managed to get your diagrams in color so that you could see this, you will see that in diagram #3, there is a thin blue line that goes down the front of the abdominal wall, goes up over the bladder, comes around and goes up over the uterus, comes down almost to the rectum and then goes back up along the sacral borders and then comes up and starts covering the other organs up in the abdominal cavity. This is important to know because anytime a surgeon does surgery, he is going to say I entered the peritoneal cavity. This is what this means. He has entered, gone through this peritoneal lining and once you do that, this disrupts or irritates that lining and this is usually where a lot of the adhesions form after surgery due to the disruption of that peritoneal cavity, so it is just an interesting thing to know about, as far as structures are concerned. It is also important to know this because in some cases, you will see procedure codes that are described as extraperitoneal or intraperitoneal, which means it really punctured that peritoneal lining or it did not.

This leads us to a discussion on the vagina and its structures. Now from a standpoint of physiology it is a fairly straightforward thing, it is a tube. It is about 7-10 cm long. It consists of smooth muscle and it is kind of corrugated inside and is very fibroelastic. It has to be, because it has to accommodate the penis and it has to accommodate a baby's head coming out the other end. So it is very elastic, very stretchy, it can get very large and very small. It can flex very well in addition. So it is a versatile organ, as it were. A cavity; but there are also things that can go wrong with it. Now, the thing about the vagina, as you will see on diagram #5, is that the back wall is longer than the front wall. And the reason for that is the uterus and cervix stick down actually the cervical part of the uterus stick down into the vagina making that fairly noticeable. You will also notice that there is on diagram #5 listed here, the posterior fornix, that is the back side of the vaginal wall and that is frequently a place where an enterocele may occur because above that back wall at the very top after you look at the rectum is the intestines. And when you get an enterocele the enterocele comes through weakening in that back wall and prolapses down into the vagina. So that is why you need to know if that is there. It is also a way of getting into the area so sometimes a physician might do a colpotomy, in other words making an incision into the vaginal wall to get up into that cul de sac, into the back of the uterus, so that is why that is important.

The support for the vagina comes from the bulbocavernosus muscles and the lower part of the levator ani and also by the cardinal ligaments of the uterus. And again, the vaginal orifice is protected by the hymen, which as we have already discussed, for most of us who have had children or having sexual intercourse regularly no longer have, we just have remnants. Also what you are going to find in the vagina but it is not depicted in this drawing is a Gartner duct. It leads to an area of the body that is leftover from when we were developing in utero from something called a Wolffian duct. Some women do not have them, and what happens is they get infected, so what you are going to usually hear is that the physician said, he did an I&D of a Gartner duct abscess or cyst, aspirated or something like that. And these are usually going to be found protruding into the vaginal wall, so when you are looking for a code for a Gartner duct cyst, you are going to be looking at how do we code for things when it is vagina, rather than looking at something on the cervix, and certainly not something on the exterior part of the body. So usually this duct cyst, if it creates a problem, is going to be along the sidewalls of the vagina.

Also what you need to know about the vagina is that there is fascia supporting the bladder and the rectum. Now it is not shown in this diagram, so I will describe to you where you need to look. I could not find an example, which showed all the structures I was looking for so make due and just kind of follow my description.

You are going to look at diagram #5. This is the side view of the uterus and you will see that the uterus is pointing forward kind of like towards the bellybutton and you will see the vaginal canal, you will see a shorter edge of the vaginal canal and then the back edge which is longer. Now the front edge on the front wall of the vagina is where you will find the pubocervical fascia and it is called that because basically it faces the pubic bone. It runs along, if you will see the front part of the cervix, which is part of the uterus. Now, this is the support area for your bladder, that is why it is up

there closer to the cervix. So if that area is weakened what happens, the bladder begins to fall into the vaginal canal that is what we call a cystocele. On the back part, back wall of the vagina here is what they call the rectovaginal fascia and this fascia is what holds in place the rectum. So what happens is that back fascia begins to get weak and falls down in its job of supporting and keeping the rectum in place, that is when we the rectum starts falling into the vagina and we get a rectocele. Now you can have a problem with that rectovaginal fascia higher up going into that posterior fourchette where the intestines are, and then that becomes an enterocele. So you can have an enterocele and a rectocele at the same time. The rectum is coming into the vagina and the intestines are coming into the vagina from the top through that posterior part of the vagina, so that is why it is important to know where those in particular are. And again, I apologize there was not a diagram I could find for this, but I am hoping that my explanation on either side will let you know how that goes.

Now you will notice that this year there was a new code added, an add-on code for a prosthesis or mesh put in either the anterior or the posterior vaginal compartment--that is exactly what it means. So if it were the pubocervical fascia that was weak and could not be closed surgically to support that bladder, the surgeon might have to go in and slap the mesh in that area to shore up the tissues. The same thing would apply on the posterior side, that is what the mesh is for. When we are talking about the vagina and what can go wrong with it, again there are things like infections, tumors or cysts; you can have benign lesions, cancerous lesions, you can have hematomas. It is basically all over the place. If you are going to excise a tumor or a cyst in the vagina, you are going to go to 57135, it is in the GYN section of the book, not a problem. If you are going to destroy lesions using a laser, heat, cold or chemicals, you are going to find those again in the GYN section of CPT 57061 or 57065. Your problem comes if you are going to try to drain a cyst in the vagina. You may in fact be out of luck for a perfect code, why? Well in the integumentary system, there is a code for a fine needle aspiration, there is a code for puncture aspiration of a cyst. There is a code for an I&D of a cyst, but those are skin, they are on the outside of the body. The vagina is an internal organ, it is not external, it is internal and this is what creates the problem.

So does that mean you can not use those codes? Not necessarily if they are the closet that you can get. But frequently when you have to drain a cyst in the vagina, you are going to be stuck using the unlisted code, the 58999, unfortunately. Some have suggested using maybe the code for the biopsy of the vagina, but again a biopsy is not removing usually an actual lesion. But on occasion, if that is what is described--the biopsy was done but the entire lesion was taken, or cyst was taken--you might use 57100 or 57105 instead. But this is going to be the one area of problems that you may have in the vagina that you are going to have a difficult time coding. If you had an incision drainage of a hematoma in the vagina is not a problem. They recently added two new codes for that, one is for an obstetric hematoma due to an obstetric condition and the other is non-obstetric and those would be 57022 and 57023. But if you are going to do a needle aspiration of the hematoma, in other words they stick a needle in and they draw the blood back out, what are you stuck with again? 10160 is in the integumentary system, it implies an external structure. The vagina is an internal structure, so the question is, can I use those codes or can I not? It is hard to know what you are going to be able to do in that case. There are also some codes that are in the section under vagina in the female genital section of the CPT code, and one I want to point out is 57150. This one is used for irrigation of the vagina and a lot of people think, oh! Irrigation of the vagina, no problem. The problem is that it is defined as being used only when that irrigation is for a bacterial, parasitic or fungal disease. So this is not the code that you would use say for painting the inside of the vagina or a lesion with TCA because you are destroying the lesion and if you are destroying the lesion, you are going to go to 57061 or 57065 because TCA is a chemical compound and that is how you are destroying it.

Now some of the terms that apply to the vagina that you might want to know about, that may or may not be important to you in the long run, and they have to do with how the codes are put together in the CPT book. If you see a code that starts with the word culdo, it is going to usually refer to something having to do with the cul de sac and that usually means the posterior fornix of the vagina, so the posterior wall somewhere in that cul de sac. If you see a code that says 'pexy' attached to it, it usually means it is a surgical fixation of something. So colpo-fixation would be fixating the vagina into place. A 'plasty' usually means repair of a defect that restores the form of a structure to its pristine condition or as nearly pristine as they can get it. So a colpoplasty meaning a vagina would be a repair of a defect in the vagina. "Rrhaphy" is something that you will see frequently, so you may see perineorrhaphy, you may see colpoperineorrhaphy, and the root word means surgical suturing. We have sutured something into place. And then finally in reference to what else can go on, you have noticed the words rectocele, cystocele and the word root for "cele" means swelling or hernia and that is strictly all that means.

That leads us to the next section we are going to talk about, which is the uterus and the cervix. Now some people have talked about it as if they were two different structures, they are not. The uterus is a pear-shaped organ, it has thick walls, it is very muscular and it is divided into two portions. The top portion is above what they call the internal os or the isthmus and that is the body of the uterus. The area below that internal os or isthmus is called the cervix. The cervix itself is as you can see in diagram #7 is sometimes referred to in the text and certainly in the CPT book as the cervix uteri, because it belongs to the uterus. It has a several sections before it reaches that internal os. There is the external opening, which opens directly into the vagina, there is the transformation zone which is just inside that external os, but right at the very edge of what they will refer to as the ectocervix, the down side of the cervix. And then above that transformation zone up to that internal os is called the endocervix, and the endocervix is generally where they are going to do an endocervical curettage, for instance. On a Pap smear they will take the little brush and they will actually go up into that endocervix, twill it around and bring it back down.

So the reason you need to know where these are is in relation to what: conization of the cervix. When you do a biopsy of the cervix, you are generally staying in the lower half. You are not generally going into the transformation zone. But when you do something called a LEEP biopsy, it is a machine that has an electric loop that goes into the transformation zone and can pull up some tissue from that area. As long as you stay right at that transformation zone, it is going to be considered a biopsy. When you go beyond the transformation zone and get-up into the endocervical canal, that is when it changed from a biopsy to conization. You are taking a cone of the cervix out and it has to include parts of the endocervix. So knowing that those exist will also help you when you are having to pick out and figure out what is the difference between 57460, which is a loop electrode biopsy of the cervix and 57461, which is a conization of the cervix. In 57461, the documentation would have to show that part of the endocervix is also removed.

The body of the uterus has three layers, it has the outer layer which is called the perimetrium and it is actually a very thin serosal layer of visceral peritoneum. So in other words, as we saw in that diagram and you can look again on diagram #8--it has the actual peritoneum where the blue line is going around the uterus, but there is also some of that peritoneal tissue that comes down farther onto the body of the uterus, but it stops at the internal os of the cervix. It is very firmly attached to the uterus so it is not a movable substance, it is like a covering film over it. The middle layer is made up of smooth muscle and it is called the myometrium. Now the myometrium is one of the places where you might find a fibroid of the uterus.

For instance, a subserosal fibroid would tend to be found on the serosal outside layer. Submucous and intramural would tend to be forming more on the inside second layer of the myometrium or more towards the inside layer of the uterus. The myometrium also has three parts. It has an outside muscle that is a continuous muscle with layers that run up and down. The middle layer is kind of interlacing spiral bundles of smooth muscles and it has a lot of veins and nerve endings in there. And then the innermost layer of the uterus is called the endometrium. That is the one that fluctuates with hormone levels, this is where the fertilized ovum will attach the endometrial lining is what is shed when it becomes thickened, part of it is shed every time you bleed during a menstrual period, so it is an important part of the uterus, it is the most functioning part. However, the organ itself of course, being very muscular, it is important for it to be that way because of course it is the uterus that contracts when you are beginning the labor and delivery process, and that pushes the baby out. So it is an interesting organ. The uterus also gets its blood supply via what they call uterine and the ovarian arteries.

Now, in diagram #8, I wanted to point out one little section for you. You will notice in this diagram there is a label #5, it is right above the rectum and the area is to the back of the uterus, which is facing forward. This is called the pouch of Douglas, or the rectouterine pouch. It is through this pouch that intestine can actually come floating down. So if you will see at the end of the pouch of Douglas, you can see the edge of the back side of the cervix and you can see the wall where the posterior fornix of the cervix is and you can see that those two places are very close, so you can see if that posterior fornix becomes very weak, then what happened to the things that are on the other side of that perineum wall in the pouch of Douglas--oops! They prolapse in and again that is what causes an enterocele. It is also important to take a look at this blue line because as I said, we have some procedures that are described as extra-peritoneal and others that are intra-peritoneal and our recent examples of this are 57282 and 57283 for the new and revised colpopexy codes. This would tell you that 57282, which is extra-peritoneal, which means outside of the peritoneum, which means that the sacrospinous and iliococcygeal muscles, ligaments are located outside of the peritoneum, while the intra-peritoneal approach for the same surgery would include the uterosacral ligament and part of the levator ani muscle, which is

behind the peritoneum, behind that blue line, up into the pouch of Douglas. So that is one reason why you need to know that.

If you look at diagram #9, I also would like to point out to you the area that is labeled for the ureters and uterine vessels of the cervix. It is very important for you to know where these are located and it is very important of course for the surgeon to know where these are located. Why I am mentioning this is that many surgeons will spend a lot of time in an operative report describing meticulous dissection of the ureters. The ureters attach to the bladder but they go up to the kidney. So if they are severed you have a major problem on your hands and also because the uterine vessels are running parallel to the floor and you could cut those very easily and the patient can hemorrhage. So it has to be meticulous dissection of around there to release them, so that they are not cut or severed, and this becomes then a standard part of surgical procedures that are in this area. It is not something separate that they do, it is a requirement so that when they do the regular surgery, they are not severing these structures. So I wanted you to be aware of why they are here and everything.

Diagram #10 shows you the uterosacral ligament, as I said the uterosacral is inside the peritoneal lining and you can see why that is. It is on the back side of the uterus towards the rectum and it attaches to the sacrum bone, so it will be inside that structure, which is the pouch of Douglas, and goes straight to the sacrum on the other side. So that is why they had to create another code because it is more work if you have to go through that peritoneum structure to get to where you want to do the surgery.

The support for the uterus comes from three sets of ligaments and what the purpose of them really is to allow the body of the uterus to rise and fall when the bladder fills and empties. The cervix remains in a fixed position, but the uterus then bends on itself going towards the bellybutton as it were. The most important of the ligaments that support the uterus is called the cardinal ligament, and these form actually the base of the broad ligament and that also surrounds uterine blood vessels. So there are a lot of nerves and lymphatic supply in that particular area that needs to be looked at or avoided when they are doing surgery. The second set, called the round ligaments, and you will see these labeled on your diagrams, particularly on diagram #9. The round ligaments come down from the top fundus of the uterus and almost go straight down, so they are another attachment place where it is giving some support to the uterus itself, and these go through the inguinal rings and the inguinal canals and they end up at the labia majora on the inside of course, not the outside. The third pair is called the uterosacral ligaments, again that is on the diagram #10, and they insert into that sacral fascia and then they connect to the back wall of the uterus, right at the level of the internal cervical os. So those are going to be the basic things going on with the uterus. As we have discussed a little bit about the surgeries, whether it is intra-peritoneal or extra-peritoneal--some of those structures will be well described in the operative note and others you are going to have to hunt and peck and wait and see what was done. Again, there is a section of codes that are strictly for the cervix that can be done, including colposcopy, and biopsies and cautery. Most of these codes are fairly straightforward and not very difficult to find the procedures that you are going to do. The same thing goes for the uterus. What can happen to the uterus, you can get your fibroids, you can have abnormal uterine bleeding, you could have cancer. There are codes for removing just about everything in there and they are fairly easy and straightforward to see. You are not going to be looking in other places of the book for these codes. The only exception might be if we were talking about urinary stress incontinence, which can also occur with other problems having to do with the uterus and supporting structures of the vagina, but as I said earlier we are not talking about the bladder this time. That would be a subject for a later date when I plan on doing another conference on absolute surgical coding for each and every specific code.

That leads us then to the fallopian tubes and the ovaries as the last ditch to be covered. Again, the main purpose of course as we all know for these particular organs are going to be for reproduction. They are the connecting tubes, as it were, from the uterus through the fallopian tube down to the ovary where the egg forms, is discharged, comes back up through the fallopian tube, down into the uterus and will implant if it has been fertilized and will be sloughed off with a menstrual period if it is not. The fallopian tubes are also referred to as oviducts, so they carry the released egg--that is what it is, passage from the ovary to the uterus. Each tube is about 7-14 cm long and they are divided into three parts. There is the isthmus, there is the ampulla and there is the infundibulum. The isthmus is the real narrow part and it is very straight. It is the longest part and the opening though into the uterus is very, very narrow, it is called the uterine ostium, and it is only about 1 mm in diameter, so it is very tiny. After you pass through the isthmus going down to the ovary, you get a wider portion, and that is called the ampulla and it turns and twists a little bit. It ends then in that

funnel-like area, you can see on diagram #11, that is called the infundibulum, and you will see at the end what appears to be fringe-like things. These are the fimbriae. They really are like little fringes. The longest fimbria however actually attaches to the ovary itself. In other words, it holds itself in place along with the ovarian ligament, which is on the other side and attaches to the outside wall of the uterus to hold everything in place. That opening of the infundibulum is about 3 mm in diameter and it actually leads directly into the peritoneal cavity. This is one of the reasons why frequently women during ovulation will experience some pain, because the contents of the egg are being released with some fluid and that fluid can go directly into the peritoneal cavity and set up some cramps, and that is how that happens, because it is like a little foreign body in there. But as a safeguard, Mother Nature allows for that little problem, the actual mouth of that infundibulum will actually very close to the surface of the ovary just prior to ovulation and you can see that happening, it kind of closes over it, on the right-hand side of diagram #11, it is kind of a neat thing that it does.

The ovaries themselves are very similar to the testes in the male. Of course there are two of them, and as you can see by the diagram, they lie on either side of the uterus. They are attached to the back of the broad ligament, and the broad ligament was something that was depicted in diagram #9, as you can see on either side of the fundus, that is how it lies in there. It is also attached by the ovarian ligament. It has another ligament which is called the suspensory ligament of the ovary which also holds it in place, suspends it above. So one attaches it directly to the uterus, and the other suspends it from above. The ovary itself, if you looked at it, it is kind of a grayish-pink color, and the outside lining can either be smooth or puckered in shape, depending on if a lot of the follicles are close to the surface or not. Its size and shape probably best described like a large almond. The ovaries also have a little shallow depression that they kind of snuggle up to, called the ovarian fossa, and it is right in the sidewall of the pelvis. But what is interesting is that the exact position of the ovary is still discussed today, because it seems as though after the first pregnancy the ovary gets displaced from where it was before you had a baby, and before you had a pregnancy, and it does not seem to go back to its original position after you have the child. So all the diagrams that you see of the ovaries are basically on a woman who has never been pregnant. That suspensory ligament is attached to the side of the uterus by a ligament of the ovary and it also is within that broad ligament so the whole thing is held up together that way.

Things that can happen with the fallopian tube: you can have paraovarian cysts. You can have tubal cysts. Again, unless you are doing something laparoscopically, there are not a lot of options here, because the laparoscopic code basically says anything in the peritoneal cavity, so since this is pretty close you can use that code for lesions on the pelvic sidewall, etc. But what do you do when it is a cyst on the fallopian tube? There is no very good code for this. Sometimes you are just going to have to say what other surgery was done? Does the documentation show that it was problematic for the patient, was it a serious amount of work to get rid of this cyst, and can I add a 22-modifier to the basic surgery to report it? That would be your biggest coding headache!

Then we come to the ovulatory cycle, which is the finale as it were for the female genital organs, this is the reason we exist. We have eggs. The ovaries make the hormones estrogen and progesterone and they carry the eggs. What is interesting is that all the eggs that a woman ever has for her entire life are present when she is born, and when she runs out of eggs, she goes into menopause. It is really very much that simple, unless of course someone removes the ovaries prematurely. The point being, you have a finite number of eggs, and when the eggs are gone you are done. When you ovulate at any given month, you actually develop more than one egg, but only usually one finally ends up growing to full size and expressing itself. So what happens is, there is something inside the ovary called Graafian follicles and inside of those follicles, as you can see by the diagram--the little black dot--the little black dot is the ovum, and so they are a miniscule size to begin with. They begin to develop with signals from the body and they get larger and larger and larger, usually one will make the race to the outside, where it will finally be released into the infundibulum, climb up the ampulla, down the isthmus, into the uterine cavity, where it will implant, if it is fertilized hopefully, and not implant some place sooner. Or if it gets there and discovers 'not there,' then it will slough off itself.

So does how the ovulation cycle work, what makes the signals possible? It is really an interaction between the brain and the ovary. There is a region in the brain called the hypothalamus and it produces the hormone gonadotropin releasing hormone. This hormone sends a message to another part of the brain, the pituitary glands, and says all is well, it is okay to have an ovulation cycle. That pituitary gland is responsible for signaling the ovaries to release the egg. So this signal comes in from two sets of hormones. First, the pituitary gland will release follicle stimulating hormone and some luteinizing hormone, not a lot. Then the pituitary measures to see how much estrogen the ovary is making, so it can then evaluate the response of the ovary to that released follicle stimulating hormone and the LH signal that has been

just been given out. So after all these follicles are developing and heading to the walls so that they can head to the pass, each one of these is going to start making estrogen. The one that makes the most estrogen is called the dominant follicle and it gets ahead of the others and it continues on to the maturation process. All the other eggs will die off, those that were in that maturation process at this time will be gone. So this is why you cannot have a baby up until you are hundred if you had a hundred eggs, because at each cycle you may be killing off maybe forty or fifty of these things. When that dominant follicle puts out this surge of estrogen, it tells the pituitary that you are ready to ovulate. When the pituitary gets that signal, it releases a large amount of luteinizing hormone, it is called an LH surge, and it signals that follicle to go ahead and release its egg. This usually happens 12-24 hours after the LH surge, and then it allows the egg to start making its way down to the uterus. After ovulation that follicle becomes what they call a corpus luteum cyst. This is a problem sometimes when it becomes infected and it needs to be removed, causing pain, gets large. And that cyst is responsible for making progesterone. Progesterone is the thing that tells the uterus to build up the lining so they can nurture that egg when it arrives. So if you had an infection in the corpus luteum cyst and once the egg got down to the uterus and it was not being fertilized, then you would have the problem of the cyst being there, it did not degenerate as it was supposed to do and therefore, you have a problem, you need to go in and do some surgery to remove it.

If the egg is not fertilized it means that it is not going to produce HCG. This is the thing that the fertilized ovum produces that then signals the body to continue making progesterone. If it is not there, the signals are lost, and about 9-11 days after ovulation it turns out that the uterine lining is no longer needed, the hormone signals are not there and menstruation begins. That drop in the hormone levels and the shedding of the lining then starts the next ovarian cycle and that is basically how that works. So in a nutshell, that is the basics of the anatomy and physiology for today, which is about all I think we can deal with, which means that we are now ready to begin taking questions.

Thank you Ms. Witt. Ladies and gentlemen, I would like to remind you that this portion of the teleconference is also being recorded. If you have a question at this time, please press *1 on your touchtone telephone. If your question has been answered or you wish to remove yourself from the queue, please press #, please limit yourself to one question at a time so that everyone may have a chance to participate. If you have another question you may re-enter the queue by pressing *1. If for any reason your question has not been answered by the end of the conference, please fax your questions to The Coding Institute at 800-508-2592.

Q & A Session:

Our first question comes from Nicole Bartley of The Coding Institute, please state your question.

Question: Hi Melanie this question was sent in before the teleconference, and it states, we have a patient on whom our doctor performed a total abdominal hysterectomy., As the patient was in the recovery room the staff noted heavier than normal vaginal bleeding. When the doctor arrived in the recovery room he determined that there was possibly a cuff bleeder from the cervical cuff edge. The patient was taken back to the OR to repair the problem. The doctor inspected the vagina, located the cuff edge bleeder and controlled the bleeding with sutures. Is this a billable service, or is this included in the hysterectomy performed the same day? Also if the service is billable, what CPT code would we use? Would we use modifier-78 in this situation?

Answer: First of all, yes, absolutely it is a billable event. Once the patient is taken to your recovery room, then you officially started the postoperative period, and anything that occurs after that requires a return to the operative room is a billable event. It would be correct in this case to use the 78-modifier and the reason for that is that the reason for the return is directly related to the procedure you just finished. Now how do you code for this thing? As I said, there are certain things within the vagina that can occur where you are just never going to have a very good code for anything. In this case you are looking at what is left of the vaginal cuff. In order words, when you do a hysterectomy, you remove that cervix and you close it off, this leaves no opening, hopefully all the veins and vessels and vessels have been cauterized so that there are no bleeders in there, but on occasion something is missed and it continues to bleed, so the surgeon actually has to go back in and expose that area again. He starts looking for bleeders, he starts looking for sutures that slipped, that did not catch the tissue properly and things like that. The problem is there really is no code within the CPT coding book that handles that kind of going back in. There are plenty of codes for re-operations with an abdominal procedure where you had gone in and done say an abdominal hysterectomy and you were re-cutting her open through the abdominal incision looking for hemorrhage, etc., But coming in from the vaginal approach there really is

nothing, so your only choice in this case would be to use the 58999 and you are going to add a modifier-78 to show that it is in the postoperative period and it is for a complication. Because you are going to use the unlisted code, you really need to also include your documentation with the claim so that the payer knows that we had to go in and do this. Now, what if, instead, she was still on the table and they still noticed bleeding and they had already sewn her up and they said, oops! We got to go back in there and see if we can find the stuff. In that case it is not a separately billable event because it is still occurring during the intra-operative portion of the surgery.

In that case, if there was a lot of bleeding, if it was a lot of hemorrhaging, if there was substantial work going on in order to control that then I would add a 22-modifier to the primary procedure to cover that part of it. But again, hemostasis is a standard operating function. In other words, you do not open a patient up, take out an organ and say oh! she is bleeding, I can close her back up and then I can go back and fix that. It is an integral part of the standard of the surgical practice. You do not leave the area of the surgery, until you know she is no longer bleeding. So in general, a payer is going to not look at this as if it were a separately billable service, if it is still done during the intra-operative period. However, if you have to take her back, if you have to re-suture, take another look, this would be the one you would use. You would not use, however the integumentary code which says wound dehiscence, complex repair. Why, because it is not external it is internal, and that is what creates the problem. I personally think we need a code for this but so far it has fallen on deaf ears.

Comments: That is all I have.

Comments: That is it, my goodness!

This was either the easiest course that we have ever been through or the not easiest course we ever been through. What I cannot tell you is it was not really my intent to cover it on this particular course but later this fall, I plan on putting together a presentation that will deal strictly with surgical coding and a description of each and every one of the CPT codes. Now, I am going to confine this one to surgeries for prolapse, surgeries for fibroids and surgeries for urinary stress incontinence because those are the most frequently performed procedures. But what I have discovered over time is that surgeons tend to produce operative reports that may be pages and pages long where they put this and they suture that and this ligament and that ligament and this ligament, etc. Yet there is actually a basic procedure that they are performing but what they have done for your benefit or for their own benefit is to detail the intricacies of the procedure, when in fact a lot of these are still a standard part of the procedure.

So my intent would be to create a conference session that would cover how do you figure out what part of that operative report is billable and what part is not for those particular surgeries? So I hope some of you may want to sign up for that one. This course, of course, was geared more to the lets take a look at the intervening structures. I am sure for a lot of you, you have had this and you were thinking Oh! This is just basics. But I think that basics are extremely important part of what it is that we do. We have to get to the basics before we can understand the complexities of the surgeries that our physicians are doing. I think it is also helpful for us, since I am assuming that most of us listening in today are woman, for us to have a much better understanding of our body and how it is put together and that of course will lead us hopefully to do more research either on the internet or reading text books to be aware of these things and what kinds of problems that our patients may in fact present with.

So that is all I have today. I also wanted to mention that the very next conference I am going to do is on May 10th and it is going to be kind of an update on Pap smear coding. I did this lecture back in 2003, but since then some of the Pap smear codes have changed, there are new technologies out there and in fact Medicare has changed some of their rules about codes that you can use to get paid for some of these Pap smears and one of those rules is going to be changing July 1, 2005. So that will be covered in this particular course. In addition, we all know that the Bethesda codes also changed, so that the way they would have been coded in 2003 is not the same as they would be coded now. So that would be a conference that I will be doing. And then in July, I will be doing one on multiple gestations. This one will go over the types of multiple gestation, what causes them, complications that occur during a pregnancy, what is the patient most at risk for and then of course coding for procedures, for twins or triplets and whatever, and the correct diagnostic linkages to be used when twins or other multiple gestations are present. I appreciate all of you being here and that ends my portion for today. Again, fax in any questions that you can think about later.



This is the conclusion of "Master the Female Anatomy for Higher OB-GYN Pay-up" national teleconference. We hope you enjoyed this session. Please complete you teleconference evaluation form and return it to The Coding Institute at the address listed on the form. Ms. Witt, The Coding Institute and I would like to thank you for your attendance. To end this call, simply hang-up your phone. Goodbye.