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How to decide if you might benefit from: Hysterectomy - removal of the uterus Oophorectomy - removal of the ovaries (09/2016)

Any surgery should be done for a very good reason, by the most appropriate surgical route, in the least debilitating way, allowing the speediest recovery of function. Deciding if the uterus or ovaries should be removed is actually two separate processes, for two different sets of reasons. So hysterectomy will be considered first and removal of the ovaries will be discussed later in this paper. First are listed a few definitions, then some background information about hysterectomy and then a section on all the reasons why some women would benefit from surgical removal of the uterus while others may happily avoid surgery.

Total Laparoscopic Hysterectomy: removal of the uterus

This procedure involves removing the uterus by operating through the instrument tubes using scopes and passing the tissue out through the vagina or through one of four of the tiny half-inch abdominal incisions. Massive uteruses and ovarian cysts, cancer and pre-cancer can all be treated by laparoscopic hysterectomy. Because there is no operating through the vagina (though tiny pieces of tissue can be passed down through it), there is no requirement for a wide vagina or loose ligaments from childbirth, and no problem with increased urinary incontinence risk later. Hospital stays are shorter and blood loss is about half. Pain is less and time off from work is only two weeks, not six. There is no increase in risk of urinary leakage after this type of procedure, and some report that mild leakage was corrected. This is because Dr. O'Hanlan connects the inner end of the vagina where the uterus was attached to the three ligaments that originally held up the uterus (Round ligament, Uterosacral ligament and Cardinal ligament). Dr. O'Hanlan uses this technique as often as is safe and effective.



A. Laparoscopic surgery uses a tiny camera to look inside. B. These are the usual incisions for a laparoscopic hysterectomy. The fourth incision is inside the bellybutton. **Now some facts about hysterectomy:** No matter what you have read on the internet or heard from your friends—what follows are the facts that apply to the vast, vast majority of women. 98% of the women who had a hysterectomy and are so happy with their results do not make websites, write books or talk about their surgery, so the internet and books are not a reliable source for most outcomes. In medicine, we report patients' opinions and their experiences by analyzing hundreds of questionnaires and publishing the results so that you know what the probable results of your surgery will be and are not misinformed or biased by the individual stories that you have heard or read. In addition, the stories that you have heard or read may have had multiple other factors that were not accounted for, such as whether or not the ovaries were removed, and if so, was hormone therapy prescribed afterward? In the correct dose? Why was the hysterectomy done in the first place? Was it necessary? Was there a cancer? Was radiation given after the surgery? Were there adhesions? Was there an infection? Was there endometriosis? All of these factors can impact a woman's postoperative comfort and sexual function. So, what follows are the facts.

Hysterectomy does not ruin your sex life. Orgasms will be the same. A. Lubrication will be the same. Your libido will not change. But be aware that these things do change as you age, and particularly as a function of your hormone status. But a hysterectomy is 5 inches away from any of the nerves of orgasm, and will not ruin any sexual function. Neither will removal of the cervix with the uterus. If you know someone who claims her sexual function was worse after hysterectomy, suggest that she see another gynecologist to make sure that she is hormonally well tuned and medically well-tuned (thyroid and hormones and other things checked). From so very many studies, including this 1999 study of 1,299 Maryland women undergoing total hysterectomy, the overwhelming evidence is that women thrive sexually and emotionally after hysterectomy. In the Maryland study, most women had sex more often, and more regularly after their surgery. 71% had resolution of their previously lowish libido, while 4% did report a new problem with low libido after the surgery. 84% had resolution of pain during intercourse, while 2% developed a new pain during intercourse. 65% of women who had few or no orgasms before surgery noted improved orgasmic ease and frequency afterwards, while 3% developed a new problem with orgasm frequency. After hysterectomy, more women had stronger orgasm, and fewer women were sexually inactive. (Rhodes et al, Hysterectomy and sexual functioning, JAMA, 1999) Ask to see the book in our office with the original articles on this research. And consider this: Kate O'Hanlan is a radical feminist, humanist, and question-authority left-of-center-woman who would never do this procedure for women if it did not cause benefit in their lives. She won't operate on you if you don't stand to benefit with a strong statistically significantly proven likelihood.

B. Hysterectomy will not cause prolapse of your organs or bladder

leakage. Studies of over 27 thousand women in the United States Women's Health Initiative confirm that hysterectomy does not increase the risk of bladder leakage (65% vs. 63%), prolapse of the bladder (32% vs. 33%) or prolapse of the rectum (19% vs. 18%).. (Hendrix, AJOG, 2002, Hendrix, JAMA, 2005) Having children, smoking, chronic constipation and obesity were the strongest risk factors to predict for incontinence and prolapse. In fact, research

also shows that weight loss is one of the most effective non-surgical remedies for urinary leakage of all types.

C. **Hysterectomy** <u>will not result in your aging faster</u>. If you are under or around age 50, you will probably want to take hormones for a short while to mimic your natural gradual transition into menopause. But remember that no matter what, you will continue to age! (That's a good thing.) And about 90% of women find they do not need hormones to feel like their normal selves after their early fifties, even though most take hormones for a while for a gradual transition. The menopausal symptoms simply go away for most, so the hormones are no longer needed. The hormones would not and could not prevent aging, wrinkles or arthritis.

D. **Hysterectomy** <u>will not make you get fat</u>. Research tells us that many women gain weight as they age, especially if they don't exercise and modify their eating habits. So if you are going to be one of those women and eat more than you need and exercise less than you should, then you will gain weight. Hormones won't make you gain weight or overeat. In a research project in which women took a pill for three years, half receiving estrogen and half a placebo or blank pill, the women on the blank pill gained about 6 pounds and the women on the estrogen gained half as much. Conclusion: you must exercise all your life and eat no more than you need all your life.

E. Hysterectomy will not harm your sense of womanhood or femininity.

Some women are afraid that they will no longer be womanly or appear or feel womanly to their spouses. Nothing could be farther from the truth. Your sense of womanhood is in your brain, your soul and your heart, but not in your genitals. No surgery can alter that. If you are under age 50 or so and have your ovaries removed, you will continue to feel normal with low dose hormone therapy that mimics your ovarian function until you would have naturally entered menopause. Please read much more about hormone therapy in the other brochures. Removing only your uterus creates no hormonal changes. **Your sexual partner cannot specifically tell that you have had a hysterectomy unless you choose to say so.**

F. Hysterectomy should not leave the cervix in. Research (Thakar NEJM, 2003, Kim AAGL,2003) comparing outcomes of women who had a supracervical or total hysterectomy confirm that urinary frequency, stress incontinence, bowel symptoms, enjoyment of sexuality, frequency of sexual activity and of orgasm were the same whether the cervix came out with the uterus or was left in place...but when it was left in place, up to 25% of women had cyclical menstrual bleeding and 2% had cervical prolapse (van der Stege, JSLS,'99) and all of them needed to take a progesterone if they needed estrogens after their surgery because 23% have estrogen sensitive endometrium left in (Okaro, BJOG, 2001). There are many reports about fibroids, chronic pain and cervical cancer in the cervical stump long after the surgery, necessitating re-operation to remove the cervix in 24% (Okaro, BJOG, 2001). Dr. O'Hanlan does not ever leave the cervix in when performing a hysterectomy.

Why would <u>anyone</u> need a hysterectomy? (ovaries discussed later)

Removal of the uterus is performed to prevent, alleviate, or treat pain, pressure, bleeding, or cancer. Each reason is described in detail in the following pages.

1. Cancerous or pre-cancerous problems of the ovaries, uterus or cervix:

Cancer or pre-cancer of the uterus – When cancer grows inside the uterus, both the womb and the ovaries must be removed in their entirety because they are lymphatically connected and can allow easy spread to the other organ. The cervix cannot be left in as any type of uterine or ovarian cancer can spread to the cervix, making it Stage II rather than I. If a pre-cancer of the uterine lining is present, it is appropriate in many cases to employ one or two 3-month trials of progesterones to regress the overgrowth of the lining. This therapy is successful in about 80% of women who do not have tiny areas of early cancer reported in their uterine biopsy. If there is still precancerous overgrowth of the lining after two progesterone trials, then a laparoscopic hysterectomy will be useful in preventing the progression to a cancer later on.

Increased risk of uterine or tubal cancer – If you have an extensive family history of women developing uterine cancer, whether from obesity, or for genetic mutations (HNPCC, PALB2 or BRCA), removing your uterus can prevent another operation later, prevent bleeding management problems, and potentially save your life. While these mutations most typically involve new cancers of the fallopian tubes and/or ovaries, reports have been published of papillary serous (ovary-like cancer) cancer of the uterus. Since uterine cancer is the most common cancer women get in their pelvis, consideration for removal, especially in the presence of other risk factors, is reasonable. One final reason, for women with tendencies to get PMS or breast cancer, is that any uterine bleeding in the perimenopause or menopause is treated with progestins (the hormonal stimulant for PMS).

Pelvic mass, infection, cancer or pre-cancer of the ovaries – A pelvic mass must be examined by both physician and ultrasonographer to determine if it is a cancer of the ovary. If the strict criteria for a benign growth are met and no worry for cancer is present, then no surgery is needed, unless the mass is huge and imposes by its size or causes pain by twisting. Many women's ultrasound picture falls into the gray area of pelvic masses – that is, their ovarian masses have one or two features of a malignancy, but appear otherwise <u>probably</u> benign. These tumors must be surgically investigated by removing them laparoscopically and giving the tumor tissues to the pathologist to examine under the microscope during the surgery to see if a malignancy is present. While most are indeed benign, some are found to be malignant in the earliest stages.

If a cancer is found in an ovary, then the entire uterus and both of the ovaries must be removed, with the appendix, the lymph nodes and a fatty pad in the abdomen called the omentum because ovarian cancer likes to spread there. This is not negotiable, except for one case; unless you have a very rare, early stage of ovarian cancer that is a very mild type and you have never had any babies, and plan to. In this rare situation, the ovary can be removed and the cancer

staging procedures done, but the other ovary and the uterus are left in for fertility without risk to the patient.

Pre-cancer and cancer of the cervix – Recurrent abnormal pap smears which have been fully investigated by thorough colposcopic (magnified) examination can often be treated by removal of the uterus. This reduces likelihood that the pre-cancer will return and reduces chances of either ovarian or uterine cancer. It is an optional treatment, however, and can sometimes be avoided by careful colposcopic Laser or Loop treatments, unless so many cervical treatments have already failed and there is very little cervix left. When cancer of the cervix is present, a specialized "radical" hysterectomy with a lymph node dissection is performed through the laparoscopes.

2. Benign problems of the uterus and ovaries, and pain

Fibroids of the Uterus – Fibroids are round swirls of overgrown benign muscular fibers in the wall of the uterus. The only reasons to remove a uterus for fibroid growth are if it causes heavy or chronic bleeding, pain or pressure, frequent urination, blockage of the ureters (tubes that bring the urine from the kidneys) or grows during the menopause while not on hormones. Then a total hysterectomy should be done, usually through the laparoscopes.

But most fibroids DO NOT BOTHER ANYONE!!! The rule is that fibroids that do not bother anyone should be left alone. Many gynecologists have been too quick to tell a woman she needs a hysterectomy when her fibroids are not bothering her, or not bothering her very much. Each woman should be the judge for herself. Some women prefer to avoid hysterectomy because menopause is near, and their symptoms are not too significant. This is reasonable because fibroids usually shrink about 30% in early menopause. Other women grow fibroids that are huge or cause discomfort and avoid hysterectomy either because they have heard awful things about hysterectomies, or they don't choose to take the time off from their busy lives to make their life a little more comfortable. Some women feel they cannot take this amount of time for themselves or draw attention from their family to have surgery. They should honor their body and value their life experience and provide for themselves as well as they provide for their families.

Heavy bleeding can be caused by fibroids or polyps on the inner mucous lining of the uterine cavity either at the wrong times or in huge quantities, even when the fibroids are small. Uterine polyps, which are small skin tags inside the cavity, can also cause bleeding, but an ultrasound can show these as separate from the fibroids. A biopsy will need to be done to confirm that any bleeding is not due to a cancer in the endometrial cavity. When bleeding is very heavy each month, many women spend the next few weeks after the period regaining strength as they use their energy to make new blood to replace the losses. This cycle, if repeated, or is heavy, can cause anemia, severe fatigue and even depression this way. A laparoscopic hysterectomy can stop the hemorrhage, prevent anemia, and allow blood stores to replenish, restoring energy and vitality, and a life free of monthly hemorrhage.

If fertility is desired in a young woman, it is appropriate to remove smaller fibroids under the uterine lining from a hysteroscopic approach (a scope passed through the cervix up into the uterus). When fertility is not desired, then the safest, simplest single approach is to remove the uterus.

Pelvic pain or pressure can be caused by fibroids on the outside of the uterus. These can become quite large and create a mass effect in your pelvis, which you can often feel. The larger fibroids can be felt above the pubic bone, but still may not cause symptoms of pelvic pain, bladder pressure, low back pain or frequency of urination. When the uterus can be felt below the bellybutton, many women notice pressure on their bladder or have low back pain. Laparoscopic hysterectomy is the easiest and safest procedure for them, with minimal blood loss and maximal probability of resolving the problem with one procedure.

If a younger woman has large fibroids and realistically desires to preserve her fertility, it is appropriate to laparoscopically remove the larger outer fibroids. This should be done about 8 weeks before she desires to becomes pregnant, so the will not prevent implantation of the pregnancy or cause pain during the pregnancy. Removal of the fibroids should be done through a horizontal incision, which is a bigger surgery because the surgeon must cut into the uterus and not sever any of the major arteries to the uterus. Blood should be donated in anticipation of this procedure, as the blood loss <u>can</u> be large. Dr. O'Hanlan does not perform this surgery on peri-menopausal women unless conception is the clear goal, because it entails taking on major risk for nil benefit except fertility.

Pain in the pelvis is best relieved by hysterectomy with oophorectomy.

Pain before or during periods - Pain can be caused by large fibroids, endometriosis of the uterus, or adhesions. Endometriosis is the tissue that is identical to endometrial lining tissue, located in extra-uterine locations. It usually grows thick and bleeds each month just like the endometrial cavity lining, only it hurts much more to have this tissue bleeding and sloughing monthly in the wrong locations. Monthly pain in the pelvis just before and during the period is common and likely due to endometriosis if it cannot be alleviated by Naprosyn (Aleve). Always try Naprosyn for gynecologic pain before seeing the doctor, as surgery can be avoided this way. When Naprosyn does not alleviate the pain, and the pain is causing a woman to miss work or simply feel awful, she should consider how long she will keep having the pain without any surgery: usually until menopause, usually age 51. If this sounds like too long, then consider the surgery.

When endometriosis is suspected as the cause of monthly pain, then it is advisable to remove not just the uterus, but also the ovaries, because they can easily stimulate new growth of endometriosis with the high levels of estrogen that the ovaries secrete. When the ovaries are left in there is a 50% chance of relief from pelvic pain. When the ovaries are removed, the relief from pelvic pain is over 90% likely.

If fertility is desired and endometriosis is suspected based on the pain profile, then laparoscopic removal of endometriosis is reasonable with conservation of the ovaries. Preserving the ovaries is essential if fertility is desired, but it also allows the endometriosis to re-grow over the next year or so, with recurrence of pain and need for repeat surgery in about 50-75%. This is due to two reasons: first, the ovaries put out much more estrogen than HRT involves, stimulating regrowth, and secondly, the ovaries often harbor microscopic or deep nests of endometriosis that progress and cause more pain or ovarian masses and need for repeat surgery. Unless fertility is

Uterus

the clear goal, the most effective surgery for painful periods and pelvic pain in general must include removal of the ovaries.

In addition, the most effective surgery for pain in the pervise of severe monthly cramps must involve removal of the uterus. As a woman ages past 40, the uterine lining can begin grow *inside the muscular wall of the uterus* (adenomyosis) and cause pain either all month long or in cycles. This is called adenomyosis, and it is commonly diagnosed in the mid to late 40's. This pain does not respond well to Naprosyn, making laparose8pile hysterectomy/oophorectomy a welcome choice for relief of pain.

Pain during sex. Painful sexual activity involving deep thrusting into the vagina is usually caused by endometriosis, adenomyosis or possibly adhesions from a prior surgery. If Naprosyn doesn't relieve pain during sexual activity, then an anatomic cause is suspected and surgery can relieve this pain with reasonable effectiveness.

Infection of the uterus, tubes or ovaries. Because pelvic infections are frequently recurrent and occasionally associated with malignant changes, surgery to remove the uterus, tubes and ovaries is standard, especially if fertility is completed.



Above: cutaway of abdomen inflated with gas to allow surgical removal of the uterus and ovaries.

Quality of life: do you deserve it? Hysterectomy causes short-term morbidity, but appears to increase average life expectancy slightly among peri-menopausal women and is cost-saving. Medical outcomes and economic consequences favor the hysterectomy over trying to preserve the uterus as medical remedies are most often unsuccessful, and ultimately the surgery needs to be done. Research on women undergoing hysterectomy shows that 78% are symptom free after their operation, and another 14% have reduced symptoms, while 8% have new symptoms.

Fully 95% report that they were pleased with their HRT or it exceeded expectations 5% reported not liking their HRT because for some it contained testosterone. Physical well-being was improved in 80% and unchanged in 15% and worse in 4.6%. 32% noted less depression than before the surgery, while 65% had no depression, and 4% became more depressed. Overall, 3% were dissatisfied. Satisfaction was associated with understanding the need for the surgery, a positive outlook, removal of the ovaries, taking HRT for at least the short-term, complete symptom relief, a quick recovery, improved physical well-being, and the absence of depression. (Khastgir et al, Am J Ob/Gyn, 2000) In another study, at 12 and 24 months after their hysterectomy 95.8% and 96.0%, respectively, reported that the hysterectomy had completely or mostly resolved the problems or symptoms they had before surgery; 93.3% and 93.7%, respectively, reported that the results were better than or about what they expected; 85.3% and 81.6%, respectively, reported that their health was better than before the hysterectomy; and 87.9% and 93.1%, respectively, reported being totally recovered.

After reviewing your symptoms that have led you to review this document, it is only you who can decide whether your life could be significantly improved by eliminating the gynecologic problems that brought you to this point. If your problems do not impact the quality of your life, then there is no benefit to surgery. If you have significant room for improvement, then make the decision to create a new life for yourself. You definitely deserve it.

Will I be happy after I have a hysterectomy?

The highest probability is that you will forget that you had a hysterectomy because your uterus will no longer be a source of pain or pressure or bleeding or cancer. Because I only do hysterectomies on women who will, based on medical evidence and feminist principles, benefit from them, my patients are healthier after their surgery than they were before. Ask any of them.

Should the ovaries be removed? (oophorectomy)

If you are <u>still involved in your fertility years</u>, an ovary should be removed only if there is a large, complex or persistent mass on it or if you have intolerable pain from endometriosis. There should be an attempt to preserve the portion of the ovary that is normal, and to make sure the other ovary is also normal. While relief from your pain is not guaranteed, and cysts or tumors may recur, surgery is effective in making certain that there is no cancer, and can reduce or eliminate the pain temporarily for conception. However, the pain or mass may re-develop in the future whenever the ovaries and uterus are left in for fertility purposes.

Removing the ovaries will put you into the menopause, but the **hormone therapy to keep you feeling normal** is now done well and will keep you feeling normal. The goal would be for you to take bio-identical estrogen in a slightly lower dose than your ovaries released, but enough to keep you feeling **perfectly yourself**, tapering the dose so you enter a natural menopause at about age 51 when most women enter menopause. Normally, the ovaries cease function at about age 51, with no known functional benefit after that age, only risk. This is why the Standard of Care is to recommend removal of ovaries incident to hysterectomy for women over age 45. This is the *softest* reason for removing the ovaries. This reason should be a very individualized decision for each woman. Ask for the information brochure on hormones for women around their menopause.

If a woman undergoing hysterectomy is over 45, and has no problems with her ovaries, no pain suggestive of endometriosis or adenomyosis and no family history of breast or ovarian cancer, she should *still consider* having the ovaries removed *incidental to her hysterectomy*. It is recommended only because the risk of ovarian cancer in her lifetime is about 1.7% with a 1.5% chance of dying of it (~70% cannot be cured). Among the risk factors for ovarian cancer are increasing age, obesity, prior breast cancer, endometriosis, prior infertility treatments, never having had a baby, and a family history of ovary or breast cancer. In one study of women who developed ovarian cancer, 14% of the women had previously had a hysterectomy and had *decided to keep* their ovaries. While it is impossible to say that all 14% could have prevented their ovarian cancer by having the ovaries removed earlier, it is reasonable to assume that most cases would have been prevented by removal of the ovaries.

If you are past your fertility years and need surgery for a mass or for pain and have <u>normal ovaries</u>, then consideration should be focused on *permanent relief of pain*, reduction in *need for further surgery*, preventing ovary cancer, and reducing risk for breast cancer. You might need hormone replacement therapy if both ovaries are removed. Hormone replacement therapy is virtually risk free up to age 60. According to the data from the United States Women's Health Initiative, estrogen does not cause breast cancer, heart attack, stroke or blood clots when used to age 60. If progestins are needed to balance the estrogen for the uterine lining, that can be done safely too. Hormone replacement therapy can be provided easily and safely, to simply ease a woman into the same transition that she would enter naturally were the ovaries left in place. In fact, replacement therapy doses are lower than the levels normally <u>made daily by the ovaries up to age 51</u>. These low doses of pill, ring or patch hormones can easily prevent hot flashes, and protect bone density and actually reduce risk of heart disease and breast cancer, until age 60, according to the Women's Health Initiative reports. There is a lifelong decrease by nearly half in new and recurrent breast cancer risk after removal of the

ovaries, even if women take low doses of pure estrogen to prevent hot flashes. It is entirely safe for women to use estrogen after their hysterectomy/oophorectomy until the age that the ovaries naturally quit, 51; and safe for even ten more years, the Women's Health Initiative tells us. Heart disease and breast cancer risk were actually slightly lower for women using estrogen alone between ages 50 and 60.

Make certain that a complex pelvic mass is not cancer: Your ovaries <u>should</u> be removed if there is a mass greater than 6 cm, or a cyst of any size that has solid parts, or if there is a significant chance that a benign cyst can recur at a later date (e.g. endometriosis) requiring repeat surgery. If you have completed your fertility, eliminating pain, avoiding further surgery, and preventing a cancer become the priorities. If there is a complex overgrowth of tissue replacing the bulk of your ovary, then it should be removed to rule out the possibility of cancer. Ultrasound or sonography (same) is used by both the abdominal view--a wand is moved over the skin of your abdomen, and the vaginal view--a small wand is placed inside your vagina-- to obtain precise measurements of the ovaries and the uterus. This is the best tool for examining the pelvic organs.

Relieve significant pain, during menses, during sex or other activity, which can result from tumor growth, adhesions or endometriosis. Leaving even a normal appearing ovary inside when treating endometriosis or pelvic pain reduces the chance of successful pain relief from over 90% to under 50%. This is because the normal ovary secretes high levels of estrogen and can re-stimulate growth of endometriosis in the pelvic organs, and because the ovary itself is a popular site for endometriosis to grow at any time, even if it looks normal to the surgeon during surgery. For this reason, it is advisable to remove both ovaries for greatest success in relief, if pelvic pain is the reason for surgery.

Relieve disability from premenstrual symptoms (PMS), including premenstrual migraines and mood disorders such as severe anxiety, rage, and depression. Ovulations cause PMS, but very few women have such severe symptoms that their lives are seriously impacted; but for some, these symptoms can be quite disruptive to their orderly living. PMS emotional changes can make some women say or do things they regret, or have to undo or apologize for out of control behavior, scheduling vacations and important events to avoid their episodes of PMS. Other symptoms such as depression, over-eating, lethargy, rage, tender breasts, migraines, etc. during the 3-10 days before your period starts may simply be bothersome. When birth control pills and antidepressants have not caused relief, removal of the ovaries can bring complete relief, and providing pure estrogen in even daily doses leaves her feeling normal, for once, and restore a woman to her even, best function. For those few women with this degree of symptoms, removal of the ovaries can be life-restoring.

Prevention of hormone-related migraines, which typically occur just after ovulation, and just before the menstrual flow, can be accomplished by removal of the ovaries. This stops estrogen fluctuations completely and reduces or eliminates the cycle-related migraines. Both the uterus and ovaries must be removed, however, to obviate the need to balance any estrogen with progesterones which can cause PMS symptoms. After the removal of both ovaries and uterus, one only needs to take estrogen alone, which is the hormone that dominates during the second week of the cycle, when women feel most normal, even, and free of migraines.

Prevention of ovarian cancer. If a woman is <u>not</u> from a family with a known high-risk for ovarian cancer, her risk is still about 2% and reduced down to near-zero by ovary removal. Given the high mortality rate (70%) of ovarian cancer, primary prevention strategies for ovarian cancer should be used whenever possible. From another research report: by removing women's ovaries who are having surgery and past their fertility, the overall incidence of ovary cancer would decrease by 85%, breast cancer rates would decrease by 50%, and colon cancer rates would decrease by 15% (Cape, Eur J Cancer Prev 1999). Many research reports confirm that removal of the ovaries reduces breast cancer by half. Research shows that few women undergoing prophylactic oophorectomy have regret about their decision.

Prevention of ovarian cancer in women from families *with cancers of the breast, ovary, colon, stomach, lung, and lymphomas* **but who are NOT BRCA+.** The risk of ovarian cancer was increased 50% in women with a family history of cancer of the stomach, increased by 70% in women with intestinal cancer, by 30% with lung cancer, and by more than 200% with breast cancer or lymphomas.(Negri, et al. <u>Eur J Cancer, 2003</u>) The chance of developing ovarian cancer associated with a family history of breast cancer was 2-10 times that of women not reporting a family history of breast cancer.

Prevention of breast cancer in the general population. Having the ovaries removed reduces risk of breast cancer by 50% (from 11% lifetime risk to about 5-6% risk), a benefit which lasts a lifetime for all women, and even true for BrCa+ women. This may be because progesterone secretion is eliminated from removing the ovaries.

Prevention of ovary and breast cancer in women with BrCa or Lynch (**HNPCC**) **mutations**. Among women who have a gene mutation for inherited breast and ovarian cancer (BrCa 1, 2, or HNPCC) removing the ovaries reduces ovarian cancer risk from about 27-44% to about 2-3%. (Rebbeck et al, NEJM, 2002)

Until completion of fertility, these women still need annual rectovaginal pelvic examination, testing of CA 125 level, and transvaginal ultrasonography. Oral contraceptive use appears to reduce the risk of ovarian and endometrial cancers while fertility is being conserved. Once fertility is no longer needed, prophylactic oophorectomy/hysterectomy is suggested. It has been well proven from the WHI that after removal of the ovaries for HNPCC, BrCa mutation, ovarian cancer or uterine cancer, *estrogen can be taken safely and without any increase in breast cancer, but rather wit a significant decrease in breast cancer and heart disease*.

Prevention of breast cancer recurrence in women with prior breast cancer.

Survival from breast cancer is improved, and the risk of ovarian cancer is greatly reduced by oophorectomy. Oophorectomy reduces new same-sided and opposite-sided breast cancer and recurrent breast cancer. The risk of new breast cancer was reduced in women who underwent bilateral oophorectomy with hysterectomy by 30-50%. The protection tended to increase with time, (Schairer et al, Int J Cancer, 1997, and Parazzini et al, Obstet Gynecol, 1997). The risks of subsequent breast cancer from low-dose ERT are not elevated over normal. It has been clearly shown that prophylactic oophorectomy has a substantial protective effect on breast cancer risk even with use of ERT, especially when performed at an early age.

Quality of life: do you deserve it? Hysterectomy causes short-term morbidity, but appears to increase average life expectancy slightly among peri-menopausal women and is cost-saving. Medical outcomes and economic consequences favor the procedure. Research on women undergoing hysterectomy shows that 78% are symptom free after their operation, and another 14% have reduced symptoms, while 8% have new symptoms. Fully 95% report that they were pleased with their HRT or it exceeded expectations, while 5% reported not liking their HRT because for some it contained testosterone. Physical well-being was improved in 80% and unchanged in 15% and worse in 4.6%. 32% noted less depression than before the surgery, while 65% had no depression, and 4% became more depressed. Overall, 3% were dissatisfied. Satisfaction was associated with understanding the need for the surgery, a positive outlook, removal of the ovaries, taking HRT for at least the short-term until age 50, complete symptom relief, a quick recovery, improved physical well-being, and the absence of depression. (Khastgir et al, Am J Ob/Gyn, 2000)

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Will I be happy after I have a hysterectomy/oophorectomy?

The highest probability is that you will forget that you had this surgery because your uterus/ovaries will no longer be a source of pain or pressure or bleeding or cancer. Because I only do hysterectomies on women who will, based on medical evidence and feminist principles, benefit from that surgery, my patients are healthier and happier after their surgery than they were before. Ask them.

Conclusions. Many women choose to keep their gynecologic symptoms because the symptoms are not bothersome, but those few women disabled by significant symptoms can have great improvement in their lives with surgery. When the reasons are real and strong for a hysterectomy and/or removal of the ovaries, women usually emerge from the surgery and recover their normal whole-life function with ease and vigor. We don't fix what ain't broken, so no one will have a hysterectomy/oophorectomy by Dr. O'Hanlan unless she really stands to benefit from one! Always be certain that you agree with all the reasons for any surgery proposed, and that all your questions have been thoroughly answered. Do not go to any surgery unless you are convinced of the need for it, aware of the benefits, have run out of non-surgical alternatives, and understand all the risks. If your doctor doesn't answer all your questions, hire another doctor!