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Brief review of recent evidence about supracervical hysterectomy

Hysterectomy should not leave the cervix in. Research (Thakar NEJM2003, Kim AAGL2003) 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 not

According to data from 26,000 women in the Women's Health Initiative, similar rates of cystocele, rectocele, and stress and urge incontinence were observed in women with and without hysterectomy.[1] Prolapse was only predicted by obesity and parity.

Neither total nor subtotal hysterectomy affect urinary continence or sexual function.[2-6]

Complication rates are not lower for supracervical hysterectomy than total hysterectomy.[5-7]

But……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).

Pap smears must be continued per standard indications as HPV is common. Some suggest that HPV testing be done before subtotal hysterectomy,[8] especially for younger women, or women who are not in monogamous relationships. Cervical cancer rates continue to rise throughout a woman's life with an age specific incidence of 30/100,000 at age 80, more than double that of age 30 to 40.

Problems can develop from the residual cervical stump, such as pain[7, 9], prolapse[3], recurrence of fibroids[10] or development of cancer[11-15], ectopic pregnancy[16], tubo-ovarian abscess[17], necrosis and shock[18] and may ultimately require resection in 25%[9, 19].

Up to 25% continue to have cyclic bleeding,[7, 20] This cyclic bleeding is evidence of persistent responsive cervical glandular tissue.

Unopposed estrogen (ERT) has been associated with development of cervical adenocarcinoma.[21] Furthermore, obesity, common among 67% of American women, is a known risk factor for cervical adenocarcinoma, just as it is for endometrial carcinoma[22]

Thus, patients who have had supracervical hysterectomy who have significant menopausal symptoms must take combined estrogen+progestin (HRT) rather than estrogen only (ERT) to minimize risk of cervical cancer.[21, 22] However, the Women's Health Initiative shows that HRT, and not ERT, increases risk of breast cancer, clots, stroke and heart disease.[23] When the entire uterus is removed, ERT is all that is needed for menopausal symptoms.

Finally, the costs are higher for the hospital in the short term, and for the patient in the long term. The cost of the surgery is higher than for total hysterectomy because a mechanical morcellator must be used to remove the upper portion of the uterus in pieces, since it cannot be removed through the vagina after the cervix is disconnected in TLH. The long-term cost for the patient is higher because she must have pap smears, may get cervical dysplasias and cancer or other problems necessitating its removal. She may continue to bleed. She will need HRT not simply estrogen for menopausal symptoms, and will have the documented increase in risks of heart attack, blood clot, stroke, and breast cancer due to HRT, but not associated with estrogen alone, as shown in the WHI.

There are no gynecological conditions that call for a supracervical hysterectomy. Dr. O'Hanlan does not do subtotal hysterectomies.

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Sexual function after <u>total</u> hysterectomy and <u>supracervical</u> hysterectomy

Davis, A. R. (2000). "Recent advances in female sexual dysfunction." Curr Psychiatry Rep 2(3): 211-4.

Female sexuality has received little scientific study. Recently, increased interest in this field has generated new research in the epidemiology, pathophysiology, and pharmacotherapy of female sexual dysfunction (FSD). A new FSD classification system has been proposed. Although sexual difficulties are highly prevalent among women, the degree of associated distress is unknown. Risk factors for FSD are probably both psychologic and physiologic. Aging or menopause is associated with lubrication difficulties, which can be treated with hormone replacement. **Hysterectomy seems more likely to result in improvement rather then deterioration of sexual functioning. Depression may be a predictor of sexual dysfunction after hysterectomy.** Vasoactive agents are currently being evaluated as treatment for female sexual arousal disorder. The most important advance in the study of female sexual function is the recent surge of interest in this relatively unexplored field.

Galyer, K. T., H. M. Conaglen, et al. (1999). "The effect of gynecological surgery on sexual desire." J Sex Marital Ther 25(2): 81-8.

This study compared the impact of surgery on sexual desire in women who had undergone hysterectomy with women whose nongynecological surgery was of a similar status. Women aged 30 to 65 completed mailed questionnaires including the Sexual Desire Questionnaire, Hurlbert Index of Sexual Desire, and the Sexual Desire Inventory. Other areas assessed were affect, mood awareness, sexual anxiety, and androgen levels**. Analysis of the questionnaire measures showed no differences in sexual desire for gynecological versus nongynecological surgery, or across the different types of hysterectomy**. There was no relation between the level of androgens and the women's sexual desire levels. The implications of these findings are discussed with regard to the potential impact of surgery on sexuality, as well as future research in the area.

Rannestad, T., O. J. Eikeland, et al. (2001). "Are the physiologically and psychosocially based symptoms in women suffering from gynecological disorders alleviated by means of hysterectomy?" J Womens Health Gend Based Med 10(6): 579-87.

Women experiencing gynecological disorders can suffer from a diversity of symptoms and problems. To what extent women are relieved of their physiologically and psychosocially based symptoms by hysterectomy is an important issue. This study aims to evaluate the long-term impact of hysterectomy on such symptoms and to compare the findings with those of a control group. Women with gynecological disorders experienced physiologically based symptoms, such as pelvic pain and urinary incontinence, to a greater degree than did the control group ($p < 0.05$), whereas bowel function and menopausal

symptoms were equally distributed in the two groups. Furthermore, these women experienced psychosocially based symptoms, such as fatigue and insomnia, to a greater degree than the control group ($p < 0.05$), whereas the groups did not differ in psychological well-being or sexual function. After hysterectomy, however, pelvic pain and sleeping disturbances were alleviated, and the state of energy and urinary function were improved ($p < 0.00$). Bowel function, menopausal symptoms, psychological well-being, sexual function, and self-perception as a woman were not influenced by the operation. Both 6 and 12 months after hysterectomy, no differences between the patients and the control group were found, except for the tendency of patients not to gain weight after the operation. **The symptoms are mostly improved or unchanged after hysterectomy, and additional problems do not seem to follow the operation.**

Rhodes, J. C., K. H. Kjerulff, et al. (1999). "Hysterectomy and sexual functioning." Jama 282(20): 1934-41.

CONTEXT: Women considering hysterectomy often are concerned about its potential effects on their sexual functioning but the effects of hysterectomy on sexual functioning remain unclear. OBJECTIVE: To examine changes in sexual functioning after hysterectomy. DESIGN AND SETTING: A 2-year prospective study (Maryland Women's Health Study) of hysterectomy, which included measures of sexual functioning prior to hysterectomy and at 6, 12, 18, and 24 months after hysterectomy, performed during 1992 and 1993. PATIENTS: Of 1299 women interviewed prior to hysterectomy, 1101 (84.8%) completed the study and provided information about their sexual functioning. Most were between the ages of 35 and 49 years, white, married or living with a partner, and high school graduates. MAIN OUTCOME MEASURES: Frequency of sexual relations, dyspareunia, orgasm, vaginal dryness, and sexual desire. RESULTS: The percentage of women who engaged in sexual relations increased significantly from 70.5% before hysterectomy to 77.6% and 76.7% at 12 and 24 months after hysterectomy. The rate of frequent dyspareunia dropped significantly from 18.6% before hysterectomy to 4.3 % and 3.6% at 12 and 24 months after hysterectomy. The rates of not experiencing orgasms dropped significantly from 7.6% before hysterectomy to 5.2% and 4.9% at 12 and 24 months after hysterectomy. Low libido rates also decreased significantly from 10.4% before hysterectomy to 6.3% and 6.2% at 12 and 24 months after hysterectomy. The distribution of women not reporting vaginal dryness in the past month improved significantly from 37.3% before hysterectomy to 46.8% and 46.7% at 12 and 24 months after hysterectomy. Prehysterectomy depression was associated with experiencing dyspareunia, vaginal dryness, low libido, and not experiencing orgasms after hysterectomy. CONCLUSIONS: **Sexual functioning improved overall after hysterectomy. The frequency of sexual activity increased and problems with sexual functioning decreased.**

Utian, W. H. and P. P. Boggs (1999). "The North American Menopause Society 1998 Menopause Survey. Part I: Postmenopausal women's perceptions about menopause and midlife." Menopause 6(2): 122-8.

OBJECTIVE: To collect information relevant to the mission of The North American Menopause Society (NAMS)--i.e., increasing understanding of menopause--by assessing perceptions held by postmenopausal women in the United States aged 50 to 65 years regarding their menopause transition and early postmenopausal years. DESIGN: During the period from June to July 1998, The Gallup Organization conducted 752 telephone interviews with a randomly selected sample of postmenopausal women aged 50 to 65 years from across the United States, based on questions developed by NAMS. In Part I of this survey, women were asked about their personal experiences with menopause, their health-related lifestyle changes since premenopause, their frequency of discussing menopause, and their rating of preparedness for menopause. Part II of this survey, including use of hormone replacement therapy as well as use of healthcare services, will be reported in a future communication from NAMS. RESULTS: The majority (51%) of the postmenopausal women surveyed reported being happiest and most fulfilled between the ages of 50 to 65 years, compared with when they were in their 20s (10%), 30s (17%), or 40s (16%). Many areas of their lives had improved since menopause, including family/home life, sense of personal fulfillment, ability to focus on hobbies or other interests, relationship with spouse/partner, and friendships. A majority (51%) said their sexual relationships had remained unchanged. Approximately three-quarters of women surveyed reported making some type of health-related lifestyle change, such as stopping smoking, at menopause/midlife. Women who had undergone hysterectomy expressed more improvement than women with an intact uterus, especially in the areas of sexual relationships, spouse/partner relationships, personal fulfillment, and physical health; data are not available regarding the health state of these women before surgery or whether they experienced surgical menopause, but this improvement did not appear to be the result of hormone replacement therapy. Women tended to look to women from their own generation for menopause-related information and believed that they have prepared the younger generation for menopause better than they were prepared by their mothers' generation. Those surveyed advised younger women to engage in healthful activities and become knowledgeable so that they could make informed health decisions. CONCLUSIONS: Although the postmenopausal women surveyed had differing views of menopause as well as their perceptions of postmenopause compared with premenopause, the majority viewed menopause and midlife as the beginning of many positive changes in their lives and health. **Hysterectomy was a factor associated with improved sexual relationships, spouse/partner relationships, sense of personal fulfillment, and physical health.**

Weber, A. M., M. D. Walters, et al. (1999). "Functional outcomes and satisfaction after abdominal hysterectomy." Am J Obstet Gynecol 181(3): 530-5.

OBJECTIVES: Our aim was to compare urinary, lower gastrointestinal, and sexual function and to describe patients' expectations and satisfaction before and after hysterectomy. STUDY DESIGN: Forty-three women completed questionnaires before and about 1 year after abdominal hysterectomy for benign gynecologic conditions. Symptoms related to urinary, lower gastrointestinal, and sexual function and satisfaction with treatment were assessed. To account for multiple comparisons, only P </=.002 was considered statistically significant. RESULTS: There were no statistically significant changes in urinary or bowel symptoms before and after hysterectomy, with preoperative symptoms resolving in some women after surgery and developing in others. Sexual function including orgasmic ability did not change in the 34 sexually active women. The level of satisfaction with treatment was very high. CONCLUSIONS: **Women experience high degrees of satisfaction and no consistent changes in urinary, lower gastrointestinal, or sexual function after abdominal hysterectomy for benign gynecologic conditions.**