Gynecol Surg (2007) 4:235–236
DOI 10.1007/s10397-007-0313-6

SURGICAL SHORTCUTS

Goff BA, Mandel LS, Drescher CW, Urban N, Gough S, Schurman KM, Patras J, Mahony BS, Andersen MR

Development of an ovarian cancer symptom index: possibilities for earlier detection

Cancer (2007)109:221–7

BACKGROUND: Currently, screening for ovarian cancer is not recommended for the general population. Targeting women with specific symptoms for screening has been evaluated only recently, because it was believed that symptoms had limited specificity.

METHODS: A case-control study of 149 women with ovarian cancer, including 255 women who were in a screening program and 233 women who were referred for pelvic/abdominal ultrasound, was conducted by inviting women to complete a survey of symptoms. Patients were divided randomly into an exploratory group and a confirmatory group. Symptom types, frequency, severity, and duration were compared between cases and controls. Logistic regression analyses were used to determine which factors independently predicted cancer in the exploratory group and then were used to develop a symptom index, which was tested for sensitivity and specificity in the confirmatory group.

RESULTS: Symptoms that were associated significantly with ovarian cancer were pelvic/abdominal pain, urinary urgency/frequency, increased abdominal size/bloating, and difficulty eating/feeling full when they were present for <1 year and occurred >12 days per month. In a logistic regression analysis, symptoms that were associated independently with cancer were pelvic/abdominal pain ($P<0.001$), increased abdominal size/bloating ($P<0.001$), and difficulty eating/feeling full ($P=0.010$). A symptom index was considered positive if any of those six symptoms occurred >12 times per month but were present for <1 year. In the confirmatory sample, the index had a sensitivity of 56.7 for early-stage disease and 79.5% for advanced-stage disease. Specificity was 90% for women age >50 years and 86.7% for women age <50 years.

CONCLUSIONS: Specific symptoms in conjunction with their frequency and duration were useful in identifying women with ovarian cancer. A symptom index may be useful for identifying women who are at risk.

van Dongen H, de Kroon CD, Jacobi CE, Trimbos JB, Jansen FW

Diagnostic hysteroscopy in abnormal uterine bleeding: a systematic review and meta-analysis

BJOG (2007)114:664–75

BACKGROUND: This study was conducted to assess the accuracy and feasibility of diagnostic hysteroscopy in the evaluation of intrauterine abnormalities in women with abnormal uterine bleeding.

METHODS: Electronic databases were searched from 1 January 1965 to 1 January 2006 without language selection. The medical subject heading and textwords for the following terms were used: hysteroscopy, diagnosis, histology, histopathology, hysterectomy, biopsy, sensitivity and specificity. The inclusion criteria were report on accuracy of diagnostic hysteroscopy in women with abnormal uterine bleeding compared to histology collected with guided biopsy during hysteroscopy, operative hysteroscopy or hysterectomy. Electronic databases were searched for relevant studies and references were cross-checked. Validity was assessed and data were extracted independently by two authors. Heterogeneity was calculated and data were pooled. Subgroup analysis was performed according to validity criteria, study quality, menopausal state, time, setting and performance of the procedure. The pooled sensitivity, specificity, likelihood ratios, post-test probabilities and feasibility of diagnostic hysteroscopy on the prediction of uterine cavity abnormalities. Post-test probabilities were derived from the likelihood ratios and prevalence of intrauterine abnormalities among included studies. Feasibility included technical success rate and complication rate.

MAIN RESULTS: One population of homogeneous data could be identified, consisting of patients with postmenopausal bleeding. In this subgroup the positive and negative likelihood ratios were 7.9 (95% CI 4.79–13.10) and 0.04 (95% CI 0.02–0.09), raising the pre-test probability from 0.61 to a post-test probability of 0.93 (95% CI 0.88–0.95) for positive results and reducing it to 0.06 (95% CI 0.03–0.13) for negative results. The pooled likelihood ratios of all studies included, calculated with the random effects model, were 6.5 (95% CI 4.1–10.4) and 0.08 (95% CI 0.07–0.10), changing the pre-test probability of 0.46 to post-test probabilities of 0.85 (95% CI 0.78–0.90) and 0.07 (0.06–0.08) for positive and negative results respectively. Subgroup analyses gave similar results. The overall success rate of diagnostic hysteroscopy was estimated at 96.9% (SD 5.2%, range 83–100%).

CONCLUSIONS: This systematic review and meta-analysis shows that diagnostic hysteroscopy is both accurate and feasible in the diagnosis of intrauterine abnormalities.

Metwally M, Gorvy D, Watson A, Li TC

Hyaluronic acid fluid agents for the prevention of adhesions after fertility-preserving gynecological surgery: a meta-analysis of randomized controlled trials

Fertil Steril (2007)87:1139–46

OBJECTIVE: To investigate by meta-analysis the role of hyaluronic acid-based fluid agents in the prevention of adhesions after fertility-preserving gynecological surgery.

METHODS: The authors searched the Cochrane Menstrual Disorders and Subfertility Group Specialized Register of Controlled Trials, The Cochrane Central Register of Controlled Trials, MEDLINE, and EMBASE for randomized controlled trials of hyaluronic acid fluid agents compared with no treatment or placebo. The main endpoints were: (1) Prevalence and change in adhesion severity at second-look laparoscopy and (2) live birth rate.

RESULTS: Four studies were included in the meta-analysis. The use of hyaluronic acid agents was associated with a decrease in the prevalence of adhesions at second-look laparoscopy (odds ratio, 0.31; 95% confidence interval, 0.19 to 0.51) and a lesser chance of deterioration of preexisting adhesions (odds ratio, 0.28; 95% confidence interval, 0.12 to 0.66). There was, however, no evidence for improvement in the prevalence of adhesions (odds ratio, 1.55; 95% confidence interval, 0.82 to 2.92).

CONCLUSIONS: There is evidence that hyaluronic acid agents may decrease the prevalence of adhesions and prevent the deterioration of preexisting adhesions. However, because of the limited number of studies available, this evidence should still be interpreted with caution.

Halmesmaki K, Hurskainen R, Teperi J, Grenman S, Kivela A, Kujansuu E et al.

The effect of hysterectomy or levonorgestrel-releasing intrauterine system on sexual functioning among women with menorrhagia: a 5-year randomised controlled trial

BJOG (2007)114:563–8

OBJECTIVE: To compare in a randomized controlled trial among women with menorrhagia, aged 35–49, the effect of hysterectomy or levonorgestrel-releasing intrauterine system (LNG-IUS) on sexual functioning.

METHODS: Of the total 236 women, 117 were treated by hysterectomy and 119 by LNG-IUS. Sexual functioning was evaluated by modified McCoy sexual scale at baseline and at 6 months, 12 months, and 5 years after initiation of treatment (hysterectomy or application of LNG-IUS).

RESULTS: Among women treated by hysterectomy, sexual satisfaction increased and sexual problems decreased. Among LNG-IUS users, satisfaction with partner decreased. In addition to treatment modality (P=0.02), estrogen therapy (P=0.01), smoking (P=0.001), night sweats (P=0.03), vaginal dryness (P=0.04), hot flushes (P=0.01), and having someone to ask for advice (P=0.03) and to share worries (P=0.01) explained changes in sexual functioning.

CONCLUSIONS: Among women with menorrhagia, hysterectomy improves sexual functioning, whereas LNG-IUS does not have such a positive effect.

Donnez O, Squifflet J, Leconte I, Jadoul P, Donnez J

Posthysterectomy pelvic adenomyotic masses observed in 8 cases out of a series of 1405 laparoscopic subtotal hysterectomies

J Minim Invasive Gynecol (2007)14:156–60

OBJECTIVES: To analyze the prevalence of an unexpected complication due to morcellation and to describe the appearance of this complication on magnetic resonance imaging, as well as its therapy.

METHODS: A well-designed controlled trial without randomization (Canadian Task Force classification II-1). One thousand four hundred five patients who underwent laparoscopic subtotal hysterectomy (LASH) in our department from 1990 through 2005 by surgeons using the same technique. Morcellation was performed using Steiner's 15-mm electric morcellator.

RESULTS: After 1405 LASH procedures, we encountered eight cases (0.57%) of deep dyspareunia and pelvic pain caused by heterogeneous masses (median size 45 mm, range 20–80 mm). Symptoms appeared between 2 and 9 years after surgery. Vaginal examination revealed a painful pelvic mass in all eight patients. The median CA 125 level was 52 IU/ml (range 19.4–128 IU/ml). Magnetic resonance imaging revealed heterogeneous masses containing hyperintense signals on T1-weighted images with saturation of fatty tissue. Injection of gadolinium revealed vascularization of the masses. Laparoscopic excision was performed, and extensive dissection of the rectum and pararectal fossa was required to isolate the masses. Histologic examination showed adenomyosis. Such complications occurred after electric morcellation of myomatous uterine corpora associated with adenomyosis.

CONCLUSION: These lesions probably result from the growth of missed fragments of uterine corpus after previous morcellation, culminating in the development of symptomatic iatrogenic adenomyomas. For this reason, the abdominal cavity must be meticulously inspected after electric morcellation, especially in patients with adenomyotic uteri.

Kongnyuy EJ, Wiysonge CS

Interventions to reduce haemorrhage during myomectomy for fibroids

Cochrane Database Syst Rev (2007) Jan 24;(1):CD005355

OBJECTIVE: To assess the effectiveness and safety of interventions (other than GnRH analogues) to reduce blood loss during myomectomy.

METHODS: Electronic searches were undertaken in the Cochrane Menstrual Disorders and Subfertility Group specialised register, CENTRAL (Cochrane Library Issue 1, 2006), MEDLINE (1966 to March 2006), EMBASE (1980 to March 2006), Current Contents (1993 to March 2006), the National Research Register, and the National Library of Medicine's Clinical Trial Register (up to March 2006). Only randomised controlled trials (RCTs) that compared interventions to reduce blood loss during myomectomy to placebo or no treatment were included. The two authors independently selected RCTs for inclusion, assessed the methodological quality and extracted data. We expressed study results as weighted mean differences (WMD) for continuous data, and odds ratios for dichotomous data.

RESULTS: Eight RCTs met the inclusion criteria: two on intramyometrial vasopressin and analogues, and one each on vaginal misoprostol, IV oxytocin, pericervical tourniquet, chemical dissection with mesna, intramyometrial bupivacaine plus epinephrine and the enucleation of myoma by morcellation while it is attached to the uterus. We found significant reductions in blood loss with misoprostol (WMD −149.00 ml, 95% confidence interval [CI] −229.24 to −68.76), vasopressin and analogues (WMD −298.72 ml, 95% CI −593.10 to −4.34), bupivacaine plus epinephrine (WMD −68.60 ml, 95% CI −93.69 to −43.51), and pericervical tourniquet (WMD −1,870.00 ml, 95% CI −2547.16 to −1192.84). There was no evidence of effect in blood loss with myoma enucleation by morcellation and oxytocin. The trials did not assess the tolerability and costs of different interventions.

CONCLUSIONS: There is limited evidence from a few RCTs that misoprostol, vasopressin, bupivacaine plus epinephrine, tourniquet and mesna may reduce bleeding during myomectomy. There is no evidence that oxytocin and morcellation have an effect on intraoperative blood loss. There is need for adequately powered RCTs to shed more light on the effectiveness, safety and costs of different interventions in reducing blood loss during myomectomy.