Many unnecessary Pap smears are performed after hysterectomy


**CLINICAL QUESTION**
How often are women undergoing Pap smear screening even though they are not at risk of cervical cancer?

**BOTTOM LINE**
Many American women who have had a hysterectomy with removal of the cervix for benign disease continue to undergo routine Papanicolaou (Pap) testing despite a lack of supporting evidence and a clear recommendation from the United States Preventive Services Task Force against it.

Conversely, the vast majority of American women who die from cervical cancer were either underscreened or never screened for cervical disease, most likely as a result of real or perceived cost barriers. The money saved by not inappropriately performing Pap tests on low-risk women would pay for the cost of screening the 17 million women in the United States who are currently underscreened for cervical cancer (J Womens Health Gender Based Med 2002; 11:103–109). (Level of evidence [LOE]=2b)

**SYNOPSIS**
Since 1996, the United States Preventive Services Task Force has suggested that routine Pap tests are unnecessary for women who have undergone hysterectomy with removal of the cervix for benign disease, placing them no longer at risk of cervical cancer. Many clinicians still perform Pap tests on these women, purportedly to screen for vaginal cancer. Since the risk of vaginal cancer is so low, however, women currently screened for cervical cancer with an intact cervix are not routinely screened for vaginal cancer.

To determine the frequency of inappropriate screening, the authors used data from a survey conducted by the Centers for Disease Control and Prevention from 1992 to 2002, reporting the proportion of women with a

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Each month, the POEMs (Patient-Oriented Evidence that Matters) editorial team reviews 105 research journals in many specialties, and selects and evaluates studies that investigate important primary care problems, measure meaningful outcomes, and have the potential to change the way medicine is practiced. Each POEM offers a Bottom Line observation and summarizes the study’s objective, patient population, study design and validity, and results. InfoPOEMs, Info-Retriever and POEMS for Primary Care are registered trademarks of InfoPOEM, Inc. POEMS and Patient-Oriented Evidence that Matters are trademarks of InfoPOEM, Inc. These POEMs are copyrighted by, and published with the express permission of InfoPOEM, Inc. and may not be copied or otherwise reproduced without the prior written consent of InfoPOEM, Inc.
Nonsurgical treatment is effective for carpal tunnel syndrome


CLINICAL QUESTION
Are nonsurgical approaches to carpal tunnel syndrome effective?

BOTTOM LINE
In this systematic review, nonsurgical treatments of carpal tunnel syndrome using injected or oral steroids provided temporary relief. Spontaneous resolution is more common than you may think: nearly 50% of patients receiving placebos improved.

Local steroid injection significantly improved symptoms, but half the patients had surgery within 1 year.

SETTING
Various (meta-analysis)

SYNOPSIS
These authors systematically reviewed English-language randomized controlled trials of nonsurgical treatments of carpal tunnel syndrome. They did an exhaustive search of the literature, including Medline, EMBASE, the Cochrane Library, and the registry of controlled trials. They also hand-searched references from previously retrieved articles, and communicated with authors to obtain unpublished material.

Each author assessed the quality of the studies using the PEDro (Physiotherapy Evidence Database) scale, which gives a total score out of 10 possible points. Any disagreements were resolved by consensus. Studies had to have a score of at least 3 for inclusion.

The authors ended up with 2 systematic reviews, 16 randomized controlled trials, and 1 quasi-experimental study that met their requirements. They found a fairly high rate of spontaneous resolution—nearly 50% of patients treated with placebo improved. Local steroid injection significantly improved symptoms, but 50% of the patients had surgery within 1 year. Oral steroids provide short-term improvement, but there are no long-term data.

The following treatment modalities had limited data on their effectiveness (small studies, poor design, mixed or conflicting results): laser-acupuncture, exercises, ultrasound, splinting, and yoga. The authors were unable to find support for the use of nonsteroidal anti-inflammatory drugs, chiropractic manipulation, pyridoxine, diuretics, or magnets.
D-dimer useful for excluding deep vein thrombosis and pulmonary embolism


Can the D-dimer test be used to rule out suspected thromboembolism?

Although diagnostic tests often are good for both identifying and excluding disease, sometimes tests do one better than the other. A normal D-dimer test result can be relied upon to rule out suspected pulmonary embolism or deep vein thrombosis. It is not particularly helpful, by itself, to rule in the diagnosis. The results of this meta-analysis confirm an earlier meta-analysis (Ann Emerg Med 2002; 40:133–144). (LOE=1a)

STUDY DESIGN
Meta-analysis (other)

SETTING
Various (meta-analysis)

SYNOPSIS
To answer the question about the role of D-dimer testing in patients with suspected deep vein thrombosis (DVT) or pulmonary embolism (PE), the authors of this meta-analysis identified 78 high-quality studies by searching Medline and EMBASE for evaluative studies in all languages. They also performed a secondary analysis using 30 more studies with weaker study designs. As is now standard in meta-analyses, 2 authors determined what studies would be included and 2 authors independently extracted the data and then compared their results.

Of the various methods of measuring D-dimer, enzyme-linked immunosorbent assay (ELISA) and
D-dimer testing effectively rules out DVT and PE, but is not very useful for ruling in the diagnosis.

Quantitative rapid ELISA have the best test characteristics. For ruling out DVT, those tests have a sensitivity of 96% and a negative likelihood ratio of 0.09–0.12.

Characteristics for ruling out PE are similar, with a sensitivity of 95% and a likelihood ratio of 0.12. In other words, this method of D-dimer testing accurately rules out DVT and PE. The test is not very useful, by itself, for identifying patients with DVT or PE, although it is helpful when combined with decision analysis or other testing (Arch Intern Med 2002; 162;907–911).

Favorable response to proton pump inhibitors doesn’t necessarily diagnose GERD


Clinical question
If patients respond to treatment with proton pump inhibitors, does that mean that they have gastroesophageal reflux disease?

Bottom line
Response to treatment with a proton pump inhibitor does not identify patients as having gastroesophageal reflux disease. As a result, an initial response should not consign the patient to long-term therapy. These results agree with other research showing that patients can use short-term treatment (2 weeks), stop treatment, and then begin treatment again if symptoms recur, which won’t happen in approximately half of them (BMJ 1999; 318:502–507). (LOE=1a)

Study design
Meta-analysis (randomized controlled trials)

Setting
Various (meta-analysis)

Synopsis
Several guidelines on the treatment of gastroesophageal reflux disease (GERD) suggest lifestyle changes and treatment with acid-suppressive therapy as the first-line approach. A favorable response to therapy with a proton pump inhibitor (PPI) often is used as confirmation of the diagnosis (the PPI test).

The investigators conducting this meta-analysis sought to determine the accuracy of this type of testing by performing a meta-analysis of all studies that compared treatment of symptomatic patients with a PPI test who also had additional testing for GERD. They searched for English-language studies by using Medline and the Cochrane Controlled Trials Register. They winnowed 136 studies to a final 15 that provided enough data for comparison. All these studies compared the clinical response to short-term treatment with a PPI (1–4 weeks) with either 24-hour pH monitoring, upper endoscopy, or symptom questionnaires. Two authors independently extracted data and determined which studies to exclude.

Patients in the studies (N=2793) represented the full range of potential GERD, from “reflux-like symptoms to erosive esophagitis. The outcome used for making the diagnosis was “complete relief of heartburn” following PPI treatment. Results compared with various structured questionnaires varied widely and were not combined.

As compared with 24-hour pH monitoring, the sensitivity of response to therapy was 78% and the specificity was 54%. Using esophagitis as the standard, both sensitivity (71%) and specificity (41%) dropped. Likelihood ratios for symptom response ranged between 1 and 2, which gives little diagnostic information.
Liposuction does not improve cardiovascular risk factors


■ CLINICAL QUESTION
Does liposuction improve cardiovascular risk-factor profiles for obese women?

■ BOTTOM LINE
Liposuction of an average of 7 kg of abdominal fat does not result in an improvement in cardiovascular risk factors, including measures of inflammation and insulin resistance. Diet and exercise are better ideas. (LOE=4)

■ STUDY DESIGN
Other

■ SETTING
Outpatient (specialty)

■ SYNOPSIS
The researchers identified 15 obese women, 8 with normal glucose tolerance (mean body mass index [BMI]=35.1 kg/m²) and 7 with abnormal glucose tolerance or type 2 diabetes mellitus (mean BMI=39.9 kg/m²). Each had a series of metabolic parameters measured at baseline, and again after large-volume liposuction. This was not a little nip and tuck—the average patient had 7.05 kg (15.5 lbs) removed during the procedure.

There was no significant improvement in the cardiovascular risk factors (blood pressure, lipid levels, plasma glucose, plasma insulin) or on measures of inflammation after the liposuction. Though the study was small, it was appropriately powered to find a statistically significant change in the outcomes reported.