HPV DNA Screening Could Help Limit Surgery

BY MICHELE G. SULLIVAN
Mid-Atlantic Bureau

WHITE SULPHUR SPRINGS, W.VA. — A treatment algorithm based on DNA identification of high-risk human papilloma virus subtypes could eliminate much unnecessary surgical intervention for women eventually found to have no cervical abnormality, William Irvin, M.D., reported.

"If the initial HPV DNA screening is negative, the likelihood that the patient harbors a high-grade squamous cervical lesion is very low, and rather than continue with diagnostic loop electrosurgical excision or conization, we would recommend conservative follow-up," Dr. Irvin of the University of Virginia, Charlottesville, said at the annual meeting of the South Atlantic Association of Obstetricians and Gynecologists.

"It's hoped that by following this algorithm, we can reduce or avoid unnecessary conization and electrosurgical excision procedures in women who are truly at low risk for cervical or endocervical lesions." (See box.)

Dr. Irvin based his suggestions on the results of two studies. A 1999 Kaiser Permanente study of 137 women with cytologic atypical glandular cells (AGC) found that HPV DNA testing identified 94% of those with high-grade squamous intraepithelial lesions (HSIL) and 100% of those with endocervical adenocarcinoma in situ (Hum. Pathol. 1999;30:816-25).

And his own small study of 28 women with cytologic AGC found that the DNA testing had both a 100% sensitivity for detecting cervical intraepithelial neoplasia and a 100% negative predictive value for ruling out dysplasia.

"The take-home message of our study is that when a patient presents with cytologic AGC, and the HPV testing is negative [for high-risk strains], the likelihood of a high-grade endocervical lesion is exceedingly small, and you could consider that smear to be either reactive in nature or, if pathologic, most likely to be arising from lesions of the endometrium or adnexa," he said.

Dr. Irvin prospectively analyzed 28 women who presented to a colposcopy clinic from 2002 to 2004. All of the women had a repeat ThinPrep System Pap smear for cytology and HPV testing, a colposcopy, and Fischer electrosurgical conization, followed by Pipelle endometrial biopsy.

A total of 58% of the group had significant pathologic abnormalities. Squamous intraepithelial lesions occurred in 50% of the group; 11 of those were HSIL, and 3 were low-grade squamous intraepithelial lesions. One woman had endocervical adenocarcinoma in situ, and one had endometrial hyperplasia.

Normal cells were found in 42% of the group. No cancers were found in study participants. Four of the HPV DNA samples were contaminated with blood, so results were available for 24 patients. Of those, 17 were positive for high-risk HPV, including all 13 dysplastic patients. Seven of the tests were negative for high-risk HPV, and none of the patients with negative test outcomes had dysplasia. ■

Management Tips for Women With Cytologic Atypical Glandular Cells

► For women older than 35 years, women younger than 35 years who have abnormal bleeding, and women with AGC that "favors endometrial cells": Perform endometrial sampling.
► If AGC "favors endocervical adenocarcinoma in situ": Perform cold-knife conization and subsequent cervical curettage.
► For AGC not otherwise specified: Perform HPV DNA testing.

If the patient is negative for high-risk HPV, repeat cytology at 6-month intervals until two consecutive normal results are obtained. If abnormal cytology persists, refer the patient to colposcopy.

If the patient is positive for high-risk HPV, the likelihood of a dysplastic cervical lesion—typically high-grade—is high. Perform colposcopy, biopsy as indicated, and obtain endocervical samplings. Base further management on the results of the evaluation.

Source: Dr. Irvin

Study Suggests Hormonal Contraceptives Do Not Cause Women to Gain Weight

WASHINGTON — Women's perceptions that they gain weight when taking hormonal contraceptives are not realities, according to a randomized study.

Data from a poster presented at the annual meeting of the Association of Reproductive Health Professionals refuted the long-held association between use of hormonal contraception and weight gain, showing that women's perceived weight changes didn't match their actual weight changes while using contraceptives.

Concerns about weight gain may lead women to discontinue hormonal contraception, according to Lauren Osborne, a graduate student, and colleagues at Columbia University, New York. No significant weight changes occurred from baseline among women who used hormonal contraception in the form of either a pill or the vaginal ring in their randomized study of 201 subjects.

Overall, 167 of the 201 women completed three menstrual cycles using either oral contraception in the form of Ortho TriCyclen Lo (ethinyl estradiol and norgestimate) or a vaginal contraceptive ring (ethinyl estradiol and etonogestrel). The study was supported by a grant from Organon Pharmaceuticals Inc., maker of the NuvaRing vaginal contraceptive ring.

On average, the women who participated in the study gained 2.8 pounds, regardless of baseline weight or BMI and type of contraceptive used. The 34 women who reported a "bad change" in weight at the study's end had gained an average of 4.4 pounds, while the 112 women who reported "no change" had gained 2.2 pounds, and the 14 women who reported a "good change" had gained 3.3 pounds.

The mean weight of all the women studied was 146 pounds, and included women with BMIs in the healthy (less than 25), overweight (from 25 to 30), and obese (greater than 30) range.

—Heidi Splete