

# Cognitive Elements Predict Vulvar Disorder Impact

BY DIANA MAHONEY  
New England Bureau

CAMBRIDGE, MASS. — Certain cognitive factors are significant predictors of pain intensity and sexual impairment in women with vulvar vestibulitis syndrome, Geneviève Desrochers said in a poster presentation at the annual meeting of the Society for Sex Therapy and Research.

The findings of her study suggest that targeted cognitive-behavioral therapy might help mediate the severe pain associated with the chronic, persistent inflammatory condition.

Hierarchical regression analysis of data obtained from 67 women with vulvar vestibulitis syndrome showed that lower levels of pain self-efficacy (confidence in one's ability to perform a range of tasks despite pain) and higher levels of pain catastrophization (a negative cognitive response to, or anticipation of, pain) were both associated with more intense pain during intercourse, reported Ms. Desrochers, who is a Ph.D. candidate in

psychology at the University of Quebec, Montreal.

All study participants had a prior diagnosis of vulvar vestibulitis syndrome. As part of the investigation, the women underwent a gynecologic examination and completed a structured interview and standardized questionnaires focusing on pain self-efficacy, pain catastrophization, anxiety, and pain during intercourse.

The regression analysis also showed that catastrophization remained a strong

predictor of the severity of pain symptoms after controlling for state-trait anxiety and self-efficacy.

"Higher levels of catastrophization were still related to more severe pain," Ms. Desrochers wrote.

Of the variables, only self-efficacy was a good predictor of global sexual functioning after controlling for pain intensity and state-trait anxiety, with lower self-efficacy predicting increased sexual impairment.

"We did find that [lower levels of] state-

trait anxiety mediated the role of catastrophizing in pain intensity," Ms. Desrochers noted.

The findings of the study are consistent with a cognitive-behavioral model of chronic pain, "and they may be important components to consider for sex therapy with this population of women," Ms. Desrochers suggested during the meeting, which was also sponsored by the American College of Obstetricians and Gynecologists. ■

## Pain Expectations Linked to Pain Perception

Decreased expectation of pain diminishes pain perception by 28%—more than a shot of morphine.

Not only do people who expect less pain report feeling less pain, but their brains respond similarly, with functional MRI (fMRI) showing less activation of pain-related areas, according to Tetsuo Koyama, M.D., Ph.D., and colleagues at Wake Forest University, Winston-Salem, N.C.

The team trained 10 healthy volunteers (aged 26-46 years) to associate tones of different durations with increasingly painful heat stimulation. (Proc. Natl. Acad. Sci. 2005;102:12950-5).

Subjects then underwent 30 trials that were monitored with fMRI. About a third of the time, the researchers mixed the signals, so that participants were expecting one temperature, but received a different one. When they expected moderate pain but received severe pain, all 10 subjects reported decreased pain intensity. Findings from fMRIs supported these perceptions, Dr. Koyama and associates said.

Expectations of decreased pain significantly reduced pain intensity-related brain activation; the severe pain evoked the same patterns as expected moderate pain.

"These data provide a neural mechanism that can, in part, explain the positive impact of optimism in chronic disease states," the investigators wrote.

—Michele G. Sullivan



## PAP was then.

## HPV is now.

Log onto [www.digene.com](http://www.digene.com):

- Latest HPV testing news and data
- Recent medical guidelines
- Reimbursement updates
- Downloadable patient counseling brochures

1. Cuzick J, et al. Management of women who test positive for high-risk types of human papillomavirus: the HART study. *LANCET* 2003;362:1871-1876.
2. Lorincz A, Richart R. Human Papillomavirus DNA testing as an adjunct to cytology in cervical screening programs. *Arch Pathol Lab Med* 2003;127:959-968.

"The Digene HPV Test" was approved by the US FDA and is also known to laboratories and physicians as the "Hybrid Capture 2 High-Risk HPV DNA Test" and "DNAwithPAP Test." This does not refer to the Digene product that tests for several types of the virus commonly referred to as "low-risk HPV," which are not associated with cervical cancer.

**DIGENE**

Digene Corporation, 1201 Clopper Road, Gaithersburg, MD 20878

Digene is a registered trademark of Digene Corporation. DNAwithPAP, hc2 High-Risk HPV DNA Test and The Digene HPV Test are trademarks of Digene Corporation. © July 2005, Digene Corporation.

The Digene® HPV Test (DNAwithPAP™) is the most advanced screen for the cause of cervical disease and cancer since the Pap was introduced.

- Increased sensitivity up to 100% means greater certainty<sup>1,2</sup>
- The only objective tool available to identify women at risk for cervical disease or cancer

Emerging as the standard of care, it's the only FDA-approved HPV test indicated for primary adjunctive screening with a Pap for women 30 and over. For more information on The Digene HPV Test, call 800-DIGENE1 or visit [www.digene.com](http://www.digene.com).

FIND DISEASE

THE DIGENE®  
**HPV TEST**

PREDICT RISK

DNAwithPAP™