What is the appropriate management for a patient with CIN1 on colposcopy?

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EVIDENCE-BASED ANSWER

Of the different strategies available for managing cervical intraepithelial neoplasia grade 1 (CIN1), testing for high-risk subtypes of the human papillomavirus (hr-HPV) DNA at 12 months has the highest sensitivity for predicting the development of CIN2 or CIN3 and leads to the lowest rate of referral to repeat colposcopy (**TABLE 1**). If the hr-HPV DNA test result is negative at 12 months, then the patient may return to routine cytology screening. If the hr-HPV DNA test result is positive, the patient should undergo repeat colposcopy.[1,2]

CLINICAL COMMENTARY

Base follow-up testing on patient preference, cost, and convenience

Patients with a colposcopic biopsy revealing mild dysplasia (HPV effect or CIN1) need follow-up due to the 12% risk of progression to CIN2 or CIN3 over 2 years.[1] The decision to follow the patient with either a single HPV test at 12 months or cytologic testing at 6 and 12 months should be based on patient preference, cost, and convenience. One of the 2 follow-up strategies should be selected and a notification system implemented to ensure patients return at the appropriate follow-up interval.

Evidence summary

One study was found that attempted to determine the appropriate follow-up for women diagnosed with CIN1 on adequate colposcopic biopsy (**FIGURE**). This 2-year prospective study examined a subpopulation of 1539 women from the ASCUS/LSIL (atypical squamous cells of uncertain significance)/low-grade squamous intraepithelial lesion) Triage Study (ALTS) to determine the ideal follow-up strategy for women diagnosed with CIN1 or HPV effect on colposcopic biopsy-obtained histology. This study randomly assigned these women with CIN1 or HPV effect to either HPV testing or colposcopic examination at 6, 12, and 18 months. Every woman underwent an exit colposcopy at 24 months.

The study found that hr-HPV testing 12 months after the initial colposcopic exam had the highest sensitivity for detecting advanced disease (92.2%) and lowest referral rate to repeat colposcopy (55%). Follow-up of these patients with repeat cytology alone at 6 and 12 months had a lower sensitivity for detection of advanced disease (85%) and greater referral rate to repeat colposcopy (60%) when compared with HPV testing at 12 months alone. Three cytologic evaluations at 6, 12, and 18 months without HPV testing increased sensitivity (95%), although this increase was not statistically significant. A much higher percentage of patients were referred to colposcopy with this strategy. Combining both hr-HPV testing and cytology at 12 months did not significantly increase the identification of advanced disease and resulted in a higher re-referral rate to colposcopy.[1–3]

TABLE

Strategies for managing CIN1

FOLLOW-UP/ INTERVENTION AFTER DIAGNOSIS OF CIN1 AT COLPOSCOPY	SENSITIVITY FOR DETECTING CIN1 OR HIGHER	REFERRAL RATE FOR REPEAT COLPOSCOPY
hr-HPV test at 12 months	92.2%	55%
hr-HPV test at 6 months	90.9%	62.4%
Cytology at 6 and 12 months	85%	60%
Cytology at 6, 12, 18 months	95%	Not available
hr-HPV test and cytology at 12 months	94.8%	64.1%

CIN1, cervical intraepithelial neoplasia grade 1; hr-HPV, high-risk subtypes of human papillomavirus.
Source: Guido et al, *Am J Obstet Gynecol* 2003[1]; Guido et al, *J Lower Genital Tract Dis* 2002.[2]

Recommendations from others

American Society for Colposcopy and Cervical Pathology consensus guidelines for the management of women with CIN were published in 2003. Their recommendation now states that follow-up after adequate colposcopy with a biopsy revealing CIN1 or HPV effect may include either repeat cervical cytology tests at 6 and 12 months or HPV testing at 12 months. After a negative test for high-risk HPV types or 2 consecutive negative cervical cytology tests, the patient may return to annual cytologic screening. If the HPV test is positive for high-risk viral types or the cytology is reported as atypical squamous cells (ASC) or higher, the patient should undergo repeat colposcopy.[4]

REFERENCES

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CONTINUED ON PAGE 149