



Title	Detection of High Risk Human Papillomavirus E6 and E7 Oncogenes for Cervical Cancer Screening
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Reference	CT 2010/01. www.sergas.es/MostrarContidos_N3_To2.aspx?IdPaxina=60538&uri=http://www.sergas.es/docs/Avalia-t/CT2010_01_deteccion%20oncogenes.pdf&hifr=1250&seccion=0

Aim

To assess the effectiveness of various HPV E6 E7 mRNA detection methods in cervical cancer and for different clinical applications, ie, when used: 1) as the primary screening method; 2) for triage of women with inconclusive results or low-grade intraepithelial lesions; and 3) for triage of women with positive results in HPV DNA tests.

Conclusions and results

Results of the studies that assessed the effectiveness of primary screening showed that specificity for detection of CIN2+ lesions was higher with the PreTec HPV Proofer test than with any of the HPV DNA tests evaluated (Sp=89%-97% vs 67%-92%), but sensitivity was relatively low in some studies (64%-86% vs 93%-100%). For this reason, and because all of the studies retrieved were cross-sectional studies with methodological limitations, this technique cannot be considered for primary screening. Despite the potential interest of these tests in triage of women with inconclusive results, or low-grade intraepithelial lesions, or normal women with HPV (+) results, there is not sufficient evidence to establish whether these techniques amount to an improvement with respect to cytology and/or HPV DNA. Nearly all of the studies used the PreTec HPV Proofer test, and it is not known whether techniques that detect a greater number of genotypes, or do so quantitatively, yield better results. The only study that assessed HPV mRNA determination using the Aptima test displayed high sensitivity (S=92%, Sp=54%).

Recommendations

Clinical trials should be designed to assess the effectiveness of HPV mRNA detection tests versus other cervical cancer screening strategies in different clinical applications.

Methods

We conducted a bibliographic search for papers published in the principal bibliographic databases, eg,

MEDLINE (PubMed), EMBASE (Ovid), and Web of Knowledge (WoK), and in specific databases focusing on systematic reviews and ongoing research projects. Papers were selected in accordance with pre-established selection criteria, and quality was assessed using the QUADAS tool.

Further research/reviews required

Yes.