

Eficacia, efectividad y eficiencia de la citología líquida

Cribado de cáncer de cérvix y diagnóstico de la infección por VPH

Efficacy, effectivity and efficiency of liquid cytology for cervical cancer screening and HPV infection diagnosis.

Executive summary

INFORMES DE EVALUACIÓN DE TECNOLOGÍAS SANITARIAS
AETSA

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MINISTERIO
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E IGUALDAD



RED ESPAÑOLA DE AGENCIAS DE EVALUACIÓN
de Tecnologías y Prácticas de Atención al Paciente (REAP)



JUNTA DE ANDALUCÍA
CONSEJERÍA DE IGUALDAD, SALUD Y POLÍTICAS SOCIALES

Executive summary

BACKGROUND

Cervical cancer is preventable through the implementation of screening tests and following up on abnormal results, thus reducing both the incidence and mortality. It has been developed new diagnostic techniques based on the preservation of the sample in a liquid stabilizer (liquid vaginal cytology). These new techniques ensure the preservation of cellular structures for morphological analysis later, compared to classic techniques of detection by conventional cytology.

OBJECTIVE

To assess the different methods of liquid cytology used for screening of cervical cancer in adult women, compared to cytology method Papanicolaou, for early diagnosis in detection of cervical cancer.

METHODS

Systematic review of literature (2006-2013). An initial search aimed to locate systematic reviews was developed, and we found some reviews updated to June 2006 so our search strategy was carried out from July 2006. MeSH terms used were “cervical intraepithelial neoplasia”, “papillomavirus infection” in the databases Medline, Embase, Cochrane Library, CRD, SCI and Hayes. Inclusion criteria were adult women who underwent the screening for early detection of cervical cancer by cytology and vaginal fluid compared with traditional methods of screening. Outcome measures were determined diagnostic accuracy rates of testing and detection of cellular abnormalities as cytological criteria. Besides a cost-effectiveness analysis was carried out based on unsatisfactory samples, and detection of cellular abnormalities.

RESULTS

851 references were located, 29 out of them were included in the report. The quality of the articles has been moderate. The studies cover more than 700,000 women between 14 and 90 years, which were screened with liquid cytology, and compared with conventional cytology methods. Localized studies showed liquid cytology techniques reduced the percentage of unsatisfactory samples compared to conventional cytology. Analysis of detection of cellular abnormalities and the indexes of diagnostic accuracy (sensitivity, specificity, positive predictive value, negative predictive value) showed no significant differences between both methods. The economic analysis offered a range of cost per percentage of unsatisfactory sample,

when CC was not dominant versus LC, between 701.17 and 1168.83 €. For detecting LSIL abnormalities, ICER were between 463.43 and 2082.81 €.

CONCLUSIONS

The studies included in this review have presented diverse methodological limitations and heterogeneous quality. This factor does that the results should be interpreted warily. The studies showed that the liquid vaginal cytology showed statistically significant results in relation with the number of unsatisfactory samples (not legible), reducing his number abreast to the conventional cytology (Papanicolau). Liquid based citology has not shown higher diagnostic capacity than traditional methods of screening for early detection of cervical cancer. In economic terms, the analysis presented limited results with variations depending on clinical trial data that do not allow clear conclusions about liquid cytology.