Mini-review

International agreement to join forces in synthesizing evidence on new methods for cervical cancer prevention

Marc Arbyn\textsuperscript{a,b,*}, Jack Cuzick\textsuperscript{c}

\textsuperscript{a} Unit of Cancer Epidemiology, Scientific Institute of Public Health, Brussels, Belgium
\textsuperscript{b} ECCG (European Cooperation on development and implementation of Cancer screening and prevention Guidelines), IARC, Lyon, France
\textsuperscript{c} Cancer Research UK Centre for Epidemiology, Department of Mathematics and Statistics, Wolfson Institute of Preventive Medicine and Cancer Research, Queen Mary University of London, London, UK

\textbf{Abstract}

Recently published baseline results of randomised controlled trials, comparing cytology with HPV-based cervical cancer screening, consistently show increased detection of high-grade cervical intraepithelial neoplasia (CIN) in the HPV-arm. These results are in line with the pooled estimates of the relative sensitivity derived from cross-sectional studies. From two randomised trials, also the longitudinal outcomes observed at the second screening round were reported. HPV-negative women, had a relative risk of developing CIN3 in the next 3 to 5 years, compared to cytology-negative women, of 0.53 (95% CI: 0.29–0.92) and 0.45 (95% CI: 0.28–0.67), respectively in the Swedish and Dutch trial. Consensus was reached at the Cochrane Workshop on Cervical Cancer Prevention, organized at the occasion of the 24th Conference of the International Papillomavirus Society, to join forces to conduct future meta-analyses of the HPV screening trials and to synthesize evidence on new methods for cervical cancer prevention.

© 2008 Elsevier Ireland Ltd. All rights reserved.
and cytology result, were respectively 0.55 (95% CI: 0.35–0.85) and 0.28 (95% CI: 0.18–0.53). Similar results have been found in the Hammersmith study in the United Kingdom [8].

These findings provide a strong case for introducing HPV testing into primary cervical screening, but more complete and detailed (age stratified and uniformly formatted) data from all relevant studies are needed in order to formulate evidence-based recommendations on target age-group, screening intervals and triage options [9].

At the Workshop, it was unanimously agreed to set up an international team of experts in systematic reviews involving the principal investigators of the main trials to meta-analyze data from all randomised and major non-randomised studies. Besides HPV-based primary screening, other topics of cervical cancer prevention to be proposed to be developed or updated in future meta-analyses are: alternative cytology-based cervical cancer screening (liquid-based and automated cytology); triage of minor cytological lesions; follow-up after treatment of high-grade cervical neoplasia; cervical cancer screening in developing countries; clinical applications of detection of over-expressed p16, a cyclin-dependent kinase inhibitor; detection of transcripts (mRNA) of HPV genes; and last but not least, prophylactic vaccination against HPV associated disease.

Acknowledgements

Financial support was received from the Gynaecological Cancer Cochrane Review Collaboration (Bath, United Kingdom), the European Commission (Directorate of SANCO, Luxembourg, Grand-Duché du Luxembourg) through the ECCG (European Cooperation on development and implementation of Cancer screening and prevention Guidelines, IARC, Lyon, France), the DWTC/SSTC (Service for Science, Culture and Technology, Brussels, Belgium), and IWT (Institute for the Promotion of Innovation by Science and Technology in Flanders) through the Unit of Health Economics and Modelling Infectious Diseases, Vaccine & Infectious Disease Institute, University of Antwerp; project number 060081).

References


