Abstract

Objective. To describe the incidence, mortality, time trends and prognostic factors for cervical cancer in Cali, Colombia, and to review the molecular epidemiological evidence showing that HPV is the major and necessary cause of cervical cancer and the implications of this discovery for primary and secondary prevention. Materials and methods. Incidence rates of cervical cancer during a 45-year period (1962-2007) were estimated based on the population-based cancer registry of Cali and the mortality statistics from the Municipal Health Secretariat of Cali. Prognostic factors were estimated based on relative survival. Review of the molecular epidemiological evidence linking HPV to cervical cancer was focused on the studies carried out in Cali and in other countries. Results. Incidence rates of squamous cell carcinoma (SCC) declined from 120.4 per 100 000 in 1962-1966 to 25.7 in 2003-2007 while those of adenocarcinoma increased from 4.2 to 5.8. Mortality rates for cervical cancer declined from 18.5 in 1984-1988 to 7.0 per 100 000 in 2009-2011. Survival was lower in women over 65 years of age and in clinical stages 3-4. Review of the molecular epidemiological evidence showed that certain types of HPV are the central and necessary cause of cervical cancer. Conclusions. A decline in the incidence and mortality of SCC and an increase in the incidence of adenocarcinoma during a 45-year period was documented in Cali, Colombia.

Keywords

cervical cancer; incidence; mortality; spatio-temporal analysis; survival; HPV; prevention; vaccines; straining; Colombia