

## ABSTRACT

The significance and use of the cytological diagnosis "atypical squamous cells of undetermined significance" (ASCUS) remain a major problem in cervical cancer screening. The prevalence of ASCUS by patient age has seldom been investigated. The present paper reports the prevalence of ASCUS in a large series of screening Pap smears from the Italian region of Emilia-Romagna. The study was based on the data collected by the Department of Health of the Emilia-Romagna Region for the first 3-year round (1997-1999) of a population-based screening programme (target age, 25-64 years). The age-specific frequency of ASCUS has been calculated as a prevalence rate per 1000 screened patients. A total of 597,386 women participated in the programme. Women diagnosed with ASCUS ( $n = 8205$  or 13.7 per 1000) accounted for 49% of the recalls for colposcopy ( $n = 16,871$ , or 28.2 per 1000). The prevalence of diagnoses of low-grade squamous intraepithelial lesions (LG-SIL) decreased progressively with age while that of high-grade SIL was slightly higher between 30 and 39 years. The prevalence of ASCUS peaked at age 45-49 years (17.3 per 1000 subjects). The observed peak reflects the prevalence of (1) cytological changes closely associated with perimenopausal age and at least compatible with the ASCUS diagnosis, and (2) cytological abnormalities induced by hormone replacement therapy.