Expression of human papillomavirus E6 and E7 oncoprotein mRNA in women with low-grade squamous intraepithelial lesions or less

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ABSTRACT. We verified the prevalence of human papillomavirus (HPV) E6/E7 protein mRNA expression in patients with low-grade squamous intraepithelial lesions (LSILs) and negative cervicovaginal cytology. To investigate the relationship between mRNA expression and viral infection type, we assessed genotyping in single infections. Samples from 825 women were submitted to the E6/E7 survey. We noticed a larger percentage of E6/E7 mRNA expression in the atypical squamous cells of undetermined significance (ASC-US) and LSIL cytologies. Negative results of mRNA expression were in accordance with negative cytologies. In positive cases, the infection by a single HPV type was most common, with type 16 being most prevalent. The expression of mRNA was most prevalent in ASC-US and LSIL cytologies, compared with the negative cytology. The infection by
a HPV type was more frequent in cases of positive expression, with HPV type 16 being found most frequently. Patients with LSIL cytologies had a higher percentage of multiple infections.

**Key words:** E6/E7 mRNA; Human papillomavirus; Negative cytology; ASC-US cytology; LSIL cytology