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RESULTS OF HPV-TESTING FOR ANAL SCREENING IN MEN WHO HAVE SEX WITH MEN

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Introduction: Anal cancer is very rare and accounts for approximately 1–2% of all tumors of the gastrointestinal tract in the general population. The cancer of the anal canal is usually associated with the human papillomavirus (HPV). The risk group for this disease is men who have sex with men (MSM). HIV-infected MSM have a higher risk of HPV infection, as well as a higher risk of persistence and malignancy.

Objectives: to study the prevalence of HPV high carcinogenic risk (HCR) among men.

Methods: The work was conducted during the period from February to June 2018. 115 MSM were examined: 58 HIV-infected and 57 HIV-negative. All men underwent an HPV test with the determination of 14 HPV types of HCR (high carcinogenic risk) — 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68. AmpliSens reagent kits were used. The results were interpreted according to the instructions to the test systems and the software supplied with them.

Results: Among the 115 examined men predominated young men aged 32.9 ± 7.58 (min-18, max-50) in the both group. In 75 (65.2%) of them were diagnosed with HPV of HCR by the HPV-test. In the HIV-positive MSM group the percentage of HPV detection was 74.1% (43/58), and 56.1% in the HIV-negative MSM group (32/57). HIV-negative MSM in 24.6% (14/57) had mixed genotypes of HPV HCR (maximum 5 genotypes in one sample). HIV-infected MSM in 53.4% (31/58) had HPV HCR mixed genotypes (maximum 9 genotypes in one sample).

The structure of the genotypes of HPV differed in the study groups. In the group of HIV-infected MSM prevailed 16, 18 and 68 genotypes of HPV. The leading genotypes among 43 HIV-infected MSM with HPV were: 16 genotype — 34,9%, 18 genotype — 27,9% and 68 genotype — 27,9% (Fig.1).

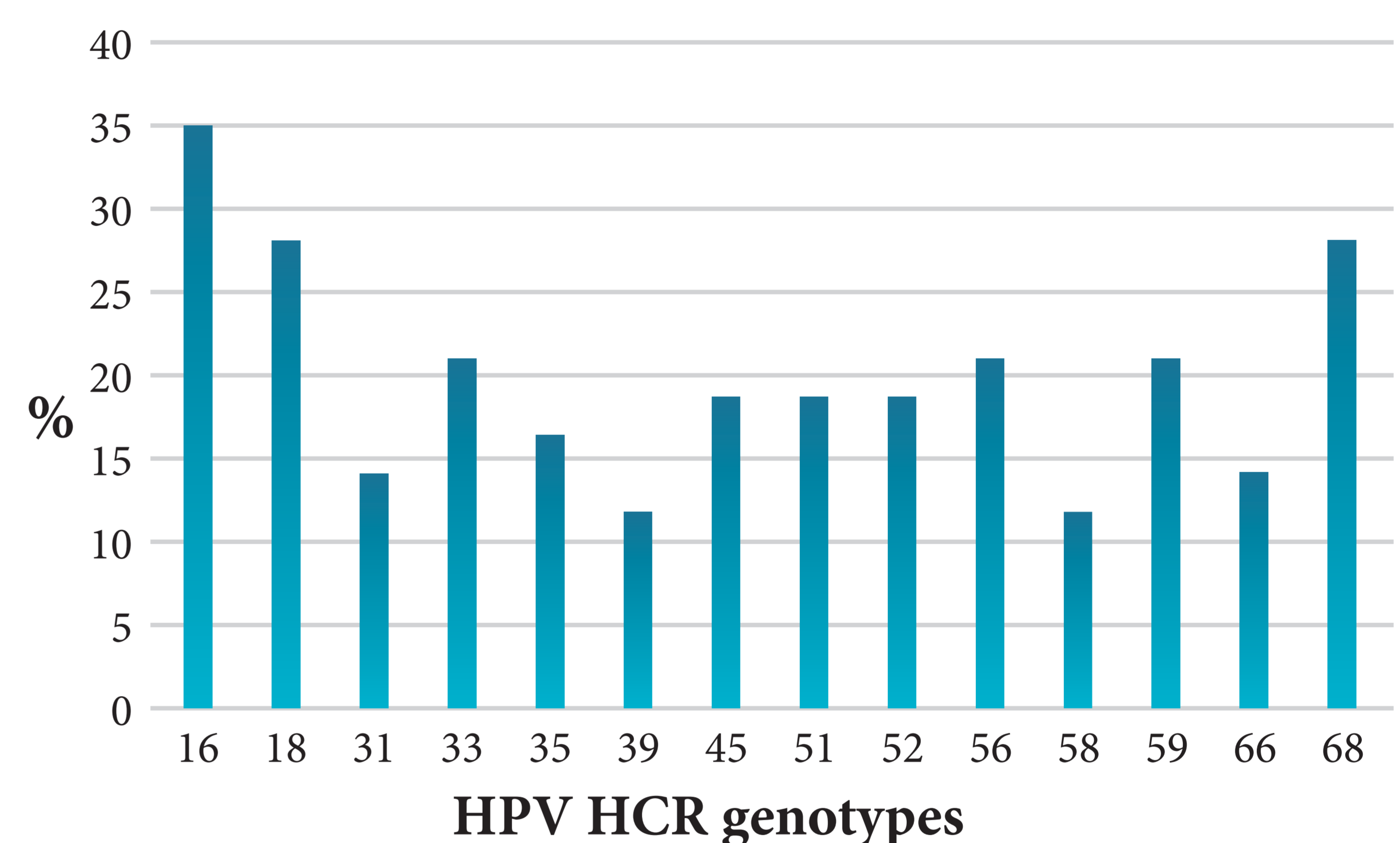


Fig.1. The structure of the genotypes of HPV HCR in the group of HIV-infected MSM

The leading genotypes among 32 HIV-negative MSM with HPV were: 68 genotype — 28%, 31 genotype — 18,7%, 16 and 18 genotype — 15,6% (Fig.2).

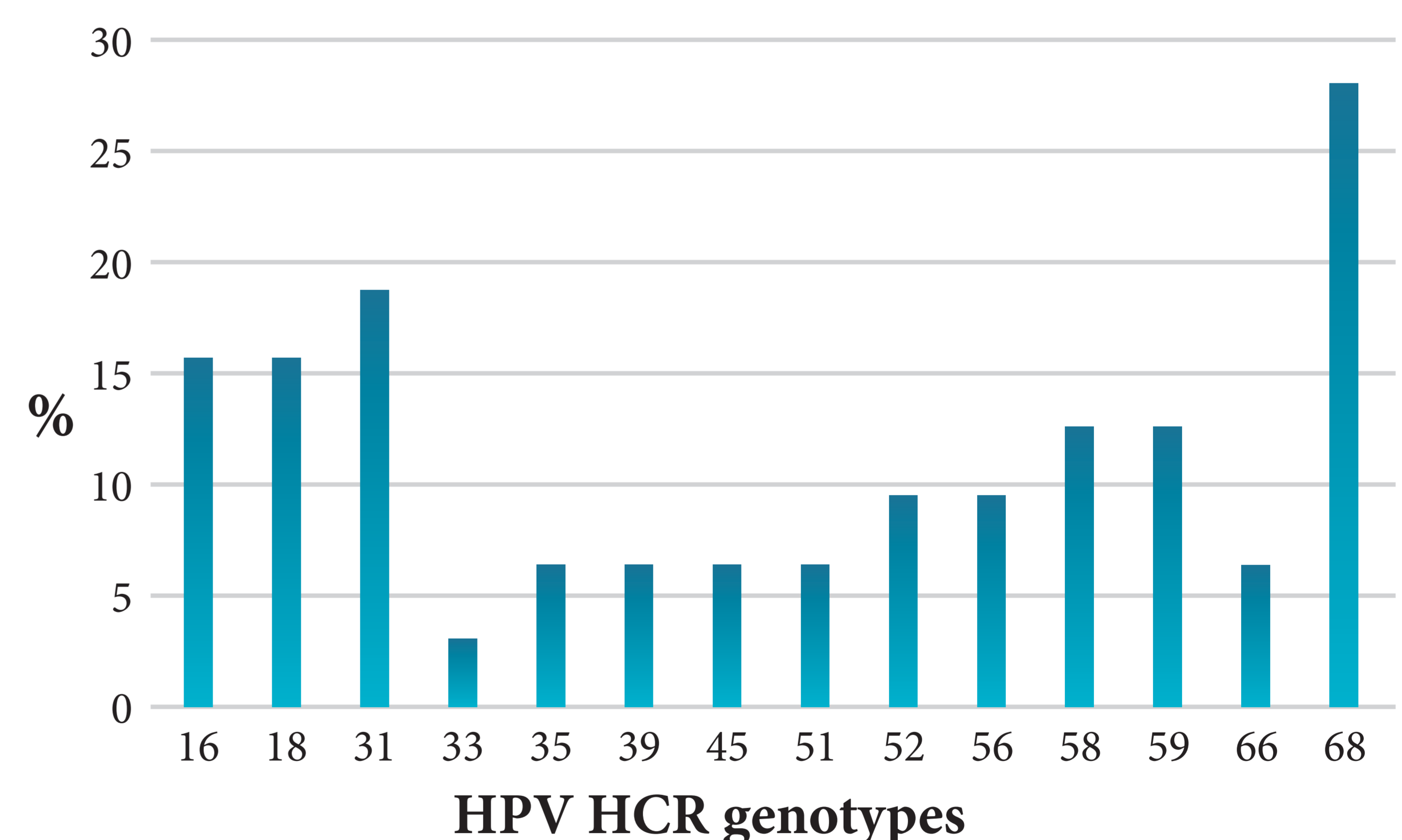


Fig.2. The structure of the genotypes of HPV HCR in the group of HIV-negative MSM

Conclusion: MSM have a high incidence of HPV infection and a wide range of detectable genotypes of HCR HPV with the highest incidence of HPV infection in HIV-infected MSM. The results should be used to develop anal screening using HPV testing for at least 13 HCR HPV genotypes.