Contents

Chapter 1  Introduction  7
  1. Pathobiology of genital lesions caused by Human Papillomavirus infection
  2. Molecular markers of HPV-related genital lesions
Aim and outline of the thesis
  1. HPV detection and genotyping in the lower genital tract lesions
  2. Role of molecular markers in the diagnosis of HPV-related lesions

Chapter 2  Prevalence of HPV DNA in different histological subtypes of cervical adenocarcinoma.  39

Chapter 3  Detection and typing of Human Papillomavirus (HPV) DNA in penile carcinoma – evidence for multiple independent pathways of penile carcinogenesis.  49

Chapter 4  Prevalence of mucosal and cutaneous Human Papillomaviruses in different histologic subtypes of vulvar carcinoma.  59

Chapter 5  Low grade vulvar and vaginal intraepithelial neoplasia: correlation of histologic features with Human Papillomavirus DNA detection and MIB-1 immunostaining.  71

Chapter 6  Diagnostic accuracy of cervical low grade squamous intraepithelial lesions is improved with MIB-1 immunostaining.  79

Chapter 7  MIB-1 immunostaining is a beneficial adjunct test for the accurate diagnosis of vulvar condyloma acuminatum.  87

Chapter 8  Proliferative activity of benign and neoplastic endocervical epithelium – correlation with HPV DNA detection.  95

Chapter 9  P16 and Ki-67 immunostaining in atypical immature squamous metaplasia of the uterine cervix: correlation with Human Papillomavirus detection.  101

Chapter 10  Double immunostaining for cytokeratin and basement membrane components is useful for detection of microinvasion in vulvar and cervical intraepithelial neoplasia.  109

Chapter 11  Discussion and conclusions  117

Chapter 12  Summary  135

Resume and publications  143