

INDEX

Note: Page numbers of article titles are in **boldface** type.

- Acetowhite test, in atypical glandular cells of undetermined significance, 319
in cervical neoplasia, 414
in human papillomavirus lesions, 275-276
- Acids, for wart removal, 413, 428
- Acquired immunodeficiency syndrome.
See *Human immunodeficiency virus infection*.
- Acrochordons, human papillomavirus in, 244
- Adenocarcinoma, cervical, colposcopy of, 319-320
management of, 326
pathology of, 318-319
- Adenocarcinoma in situ, cervical, acetowhite test of, 319-320
colposcopy of, 319
human papillomavirus in, 320
management of, 326
versus atypical glandular cells of undetermined significance, 320, 324-326
- Adenosquamous carcinoma, cervical, pathology of, 318-319
- Affinity labels, in in situ hybridization, 292
- AGUS. See *Atypical glandular cells of undetermined significance (AGUS)*.
- AIDS. See *Human immunodeficiency virus infection*.
- Antiestrogen agents, in human papillomavirus infections, 415-416
- Antioxidants, in human papillomavirus infections, 417
- Antisense RNA, in human papillomavirus, 416-417
- Archive tissues, human papillomavirus detection in, 295
- ASCUS. See *Atypical squamous cells of undetermined significance (ASCUS)*.
- Atypical glandular cells of undetermined significance (AGUS), cervical, 317-325
acetowhite test in, 319
cancer risk in, 318, 320-321
colposcopy in, 319-320, 323-326
definition of, 318
diagnostic difficulties with, 320-321
favoring dysplasia or neoplasia, 318, 321, 324-325
favoring reactive, 318, 321
human papillomavirus in, 320
management of, 321-325
natural history of, 318
pathology of, 318-319
subclassification of, 321
versus adenocarcinoma, 320, 324-326
versus adenocarcinoma in situ, 320, 324-326
versus atypical squamous cells of undetermined significance, 318, 323
- Atypical squamous cells of undetermined significance (ASCUS), cervical, cancer risk in, 309-310
epidemiology of, 309
favoring dysplasia, 312-313
favoring reactive, 312-313
management of, 309-317
controversies in, 309
human papillomavirus status and, 314-317
repeat cytology in, 310-311
subclassification considerations in, 311-313
universal colposcopy in, 313-314
recurrent, 316
versus atypical glandular cells of undetermined significance, 318, 323
- Bethesda system, for cervical intraepithelial neoplasia classification, 274, 307-308
- Biopsy, in high-grade squamous intraepithelial lesion, 335

Biopsy (*Continued*)

- in human papillomavirus lesions, 276
- Bovine E5 oncoprotein, 391
- Bowen's disease, human papillomavirus in, 238, 240
- Brush, endocervical, in atypical glandular cells of undetermined significance, 321
- Cancer, cervical. See *Cervical cancer*.
 - head and neck, human papillomavirus in, 244
- Carcinogenesis, human papillomavirus in. See *Human papillomavirus, in oncogenesis*.
- Carcinoma. See also *Adenocarcinoma*.
 - adenosquamous, cervical, pathology of, 318-319
- Catalyzed reporter deposition, in situ hybridization, 292
- Cervical cancer, cytology in. See *Cytology, in cervical neoplasia*.
 - dysplasia-carcinoma sequence in, 375
 - epidemiology of, versus pathologic type, 318-319
 - human papillomavirus in, 257-270. See also *Human papillomavirus, in oncogenesis*.
 - epidemiology of, 243-244
 - evidence for, 257-262
 - pathogenesis of, 261-262
 - prognosis of, 264-267
 - risk factors for, 262-267
 - sexual behavior and, 264
 - statistical issues in, 345-367
 - cervical lesion status errors, 349-352
 - covariate problems, 352
 - in abnormal Pap smear results, 354-360
 - in asymptomatic women, 359, 361-365
 - in cervical cancer screening, 353-365
 - measurement error (misclassification bias) effects, 347-353
 - prevalence survey errors, 348-349
 - principles of, 346-347
 - telomerase interactions with, 378-379
 - transmission of, 246-247
 - treatment of, 414-415
 - versus viral subtypes, 261-262, 266-267, 409-410
 - human papillomavirus-negative, 265-266
 - in HIV infection, 415
 - mortality in, 303
 - pathology of, 318-319, 375
 - risk factors for, 258, 262-267
 - screening for, cytology in. See *Cytology, in cervical neoplasia*.
 - history of, 304-306
 - in asymptomatic women, human papillomavirus detection in, 359, 361-365
 - specimen collection in, 375
 - telomerase in, cervical specimen studies in, 375-379
 - detection methods for, 370-375
 - human papillomavirus interactions with, 378-379
- Cervical intraepithelial neoplasia, carcinoma development in, 375. See also *Cervical cancer*.
 - classification of, 274, 304, 306
 - cytology in. See *Cytology, in cervical neoplasia*.
 - human papillomavirus in, 257-270, 320
 - clinical course of, 262-264
 - evidence for, 257-262
 - high-grade, 262-263
 - low-grade, 262-263
 - management according to, 314-317
 - prognosis of, 264-267
 - risk factors for, 262-267
 - spectrum of, 262-263
 - statistical issues in, 349-352
 - testing for, 310
 - versus viral subtypes, 266-267
- Pap classification system for, 304
- pathology of, 375
- treatment of, atypical glandular cells of undetermined significance (AGUS), 317-325
 - atypical squamous cells of undetermined significance (ASCUS), 309-317
 - Bethesda system and, 274, 307-308
 - high-grade squamous intraepithelial lesion (HSIL), 335-336
 - historical perspective of, 304-306
 - low-grade squamous intraepithelial lesion (LSIL), 325-335
- Cervicography, in human papillomavirus lesions, 276
 - in low-grade squamous intraepithelial lesion, 334-335
- Chemotherapy, for cervical cancer, 414-415
- Cidofovir, in human papillomavirus infections, 416
- CIN. See *Cervical intraepithelial neoplasia*.
- Colorimetric detection, in situ hybridization, in human papillomavirus detection, 292-293
- Colposcopy, in adenocarcinoma or adenocarcinoma in situ, 319-320, 326
 - in atypical glandular cells of undetermined significance, 323-326
 - in atypical squamous cells of undetermined significance, 310-314
 - in cervical neoplasia, 414
 - inappropriate use of, 307

- in high-grade squamous intraepithelial lesion, 335-336
- in human papillomavirus lesions, 276
- in low-grade squamous intraepithelial lesion, 332-335
- Condyloma acuminata. See *Warts, genital*.
- Conization, in atypical glandular cells of undetermined significance, 324
 - in cervical adenocarcinoma or adenocarcinoma in situ, 326
 - in high-grade squamous intraepithelial lesion, 336
- Contact sensitizers, in wart removal, 428-429
- Controls, in in situ hybridization, 293-294
- Cryotherapy, for warts, genital, 412-413
 - nongenital, 428
- Culture, of human papillomavirus, 237
- Curettage, endocervical, in atypical glandular cells of undetermined significance, 321, 323-326
- Cytology, in cervical neoplasia, 273-275, 303-343, 413-415
 - atypical glandular cells of undetermined significance (AGUS) in, 317-325
 - atypical squamous cells of undetermined significance (ASCUS) in, 309-317
 - Bethesda system in, 274, 307-308
 - cancer statistics and, 303
 - endometrial cells in, 322
 - future of, 336-337
 - high-grade squamous intraepithelial lesion (HSIL) in, 335-336
 - historical aspects of, 304-306
 - human papillomavirus detection in, 258-259
 - error potential in, 353
 - in asymptomatic women, 359, 361-365
 - principles of, 353-354
 - sensitivity and specificity of, 355-360
 - statistical issues in, 353-365
 - with abnormal Pap smears, 354-360
 - low-grade squamous intraepithelial lesion (LSIL) in, 325-335
 - repeat, in atypical squamous cells of undetermined significance, 310-311
 - in low-grade squamous intraepithelial lesion, 329-332
 - reporting of, elements of, 308-309
- Dichloroacetic acid, for wart removal, 428
- Diet, in human papillomavirus infections, 417-418
- Dot blot test, in human papillomavirus infections, 277-279
- E5 oncoprotein, of human papillomavirus, 391-392
- E6 oncoprotein, of human papillomavirus, functions of, 396-398
 - in cell cycle checkpoint disruption, 392-394
- E7 oncoprotein, of human papillomavirus, functions of, 394-396
 - in cell cycle checkpoint disruption, 392-394
- Electrosurgery, for genital warts, 412-413
- Electrosurgical loop excision, in atypical glandular cells of undetermined significance, 324
- Endocervical curettage, in atypical glandular cells of undetermined significance, 321, 323-326
- Endometrial cells, in Pap smear, 322
- Epidermodysplasia verruciformis, human papillomavirus in, 242, 427
- Estrogen, human papillomavirus infections and, 399-400, 415-417
- Exposure odds ratio, in statistical studies, of human papillomavirus association with cervical cancer, 346-347, 351
- Fixatives, in in situ hybridization, 290-291
- 5-Fluorouracil, in genital warts, 412-413
- Fomites, in human papillomavirus transmission, 425
- Formalin, as fixative, in in situ hybridization, 290-291
- Genital warts. See *Warts, genital*.
- Gynecologic infections, human papillomavirus. See also *Warts, genital*.
 - cancer risk in, 259-261
 - classification of, 272
 - diagnosis of, 271-287, 410
 - clinical, 275-276
 - molecular, 277-279
 - Pap smear in. See *Cytology, in cervical neoplasia*.
 - serologic, 276-277
 - signal amplification method for, 279-281
 - target amplification method for, 281-283
 - epidemiology of, 243, 245, 259-260, 407

- Gynecologic infections (*Continued*)
 neoplastic transformation in. See *Cervical cancer; Cervical intraepithelial neoplasia*.
 pathogenesis of, 408–410
 risk classification of, 272
 spectrum of, 272
 statistical issues in, measurement error (misclassification bias) effects, 347–353
 treatment of, 407–422
 antiestrogens in, 415–416
 combination therapies in, 416–417
 dietary, 417–418
 future of, 415–418
 in HIV infection, 415
 options for, 410–411
 preventive, 417
 suboptimal, 408, 410
 vaccines in, 416–417
 warts, 411–413
 with abnormal cytology, 413–415
 virology of, 408–410
 virus subtypes and, 238, 241, 409–410
- Head and neck cancer, human papillomavirus in, 244
- Herpes simplex virus infections, as cofactor, in cervical cancer, 264–265
- High-grade squamous intraepithelial lesion (HSIL), cervical, management of, 335–336
- HIV infection. See *Human immunodeficiency virus infection*.
- Hormones, human papillomavirus infections and, 399–400, 415–417
- Host factors, in human papillomavirus oncogenesis, 398–400
- Human immunodeficiency virus infection, human papillomavirus infections in, cervical cancer in, 415
 epidemiology of, 245
 warts in, 426–427
- Human papillomavirus, classification of, 272
 culture of, 237
 cytopathic effects of, 258–259
 epidemiology of, 383
 evolution of, 237
 genes of, 236–237, 385–388, 408–409
 expression of, 248
 transformation of, 248–249, 261–262
 in adenocarcinoma in situ, 320
 in atypical glandular cells of undetermined significance, 320
 in cervical cancer. See *Cervical cancer, human papillomavirus in*.
 in cervical intraepithelial neoplasia. See *Cervical cancer; Cervical intraepithelial neoplasia*.
 in epidermodysplasia verruciformis, 427
 in low-grade squamous intraepithelial lesion, 333–335
 in oncogenesis, 383–406, 409
 cell cycle checkpoint disruption in, 392–394
 cellular effectors of, 398–400
 epidemiologic aspects of, 383–384
 experimental models of, 388–390
 genomic organization and, 385–388
 host effectors of, 398–400
 oncoproteins in, 390–398
 versus virus subtype, 384
 integration status of, determination of, 295–298
 life cycle of, 408–409
 localization within lesions, 295
 prevalence of, 243–245
 structure of, 235–236
 subtypes of, 235–237, 238–242
 in atypical squamous cells of undetermined significance, 314–317
 in situ hybridization in, 299
 nononcogenic, 384
 Southern blot typing of, 277
 versus cervical cancer risk, 266–267, 409–410
 versus clinical manifestations, 238–242
 versus oncogenic potential, 261–262, 384, 387–388
 tests for. See *Human papillomavirus infections, diagnosis of; Human papillomavirus infections, tests for*.
- Human papillomavirus infections, 235–255
 cervical neoplasia in. See *Cervical cancer; Cervical intraepithelial neoplasia*.
 classification of, 272, 423–424
 cutaneous type of, 272
 diagnosis of, 271–287. See also *Human papillomavirus infections, tests for*.
 clinical, 275–276
 in situ hybridization in. See *In situ hybridization*.
 molecular, 277–279
 nongenital, 424
 Pap smear in. See *Cytology, in cervical neoplasia*.
 serologic, 276–277
 signal amplification method for, 279–281
 target amplification method for, 281–283
 differential diagnosis of, 424
 epidemiology of, 237–244, 383
 genital, 243, 245, 259–260, 407
 misclassification bias in, 348–349
 nongenital, 424–426
 gynecologic. See *Gynecologic infections, human papillomavirus*.
 historical perspective of, 271

- immunologic response in, 249-250
 in HIV infection, 245
 in immunodeficiency, 426-427
 latent, 409
 mucosal type of, 272
 natural history of, 426
 nongenital. See *Warts, nongenital*.
 pathogenesis of, 247-249, 408-410
 risk factors for, 272, 398-399
 spectrum of, 238-242, 272
 spontaneous regression of, 250
 tests for, advantages of, 316-317
 sensitivity of, 314-316
 statistical issues in, 345-367
 cervical lesion status errors, 349-352
 covariate problems, 352
 in abnormal Pap smear results, 354-360
 in asymptomatic women, 359, 361-365
 in cervical cancer screening, 353-365
 measurement error (misclassification bias) effects, 347-353
 prevalence survey errors, 348-349
 principles of, 346-347
 time course of, 248
 transmission of, 244-247
 nongenital, 425
 treatment of, genital, 407-422
 nongenital, 427-429
- Human telomerase reverse transcriptase, detection of, 371-375
- Hybrid Capture System tests, in human papillomavirus infections, 279-281
- Hybridization, in situ. See *In situ hybridization*.
- Hysterectomy, in cervical adenocarcinoma or adenocarcinoma in situ, 326
- Imiquimod, in genital warts, 412-413
- Immune status, human papillomavirus infections and, 245, 249-250
- Immunodeficiency, warts in, 426-427
- Immunohistochemistry, in human telomerase reverse transcriptase detection, 373-375
 versus in situ hybridization, 289
- In situ hybridization, in human papillomavirus infections, 279, 289-301
 advantages of, 295-298
 automated, 300
 controls in, 293-294
 detection in, 292-293
 for spatial localization, 295
 for viral integration status, 295, 298
 hybridization in, 291-292
 in archive tissues, 295
 limitations of, 298-300
 probes in, 291-292
 sensitivity of, 298-299
 technical complexity of, 300
 tissue processing and pretreatment in, 290-291
 in human telomerase reverse transcriptase detection, 372
- Indian file pattern, in high-grade squamous intraepithelial lesion, 335
- Indole-3-carbinol, in human papillomavirus infections, 415-416
- Interferon(s), for genital warts, 412-413, 417
- ISH. See *In situ hybridization*.
- Keratolytics, in wart removal, 428
- Kidney transplantation, warts in, 426-427
- Koilocytes, in cervical neoplasia, human papillomavirus and, 258
 low-grade squamous intraepithelial lesion, 326-327
- Lactic acid, in wart removal, 428
- Laser therapy, for genital warts, 412-413, 417
- Low-grade squamous intraepithelial lesion (LSIL), cervical, 325-335
 human papillomavirus in, 333-335
 management of, adjunctive testing in, 334-335
 colposcopy in, 332-334
 options for, 328-329
 repeat cytology in, 329-332
 overdiagnosis of, 327
 pathology of, 326-327
 versus age, 327-328
- Molecular diagnosis. See specific tests, e.g., *Polymerase chain reaction*.
- Neoplasia, cervical. See *Cervical cancer; Cervical intraepithelial neoplasia*.
- Oligonucleotide probes, in in situ hybridization, 291-292
- Oncogenesis, human papillomavirus in. See *Human papillomavirus, in oncogenesis*.
- Oral cavity, human papillomavirus in, 244

- Oral contraceptives, as risk factor, in cervical cancer, 265
- Pap smear. See also *Cytology, in cervical neoplasia*.
 endometrial cells in, 322
 in human papillomavirus detection, 273–275
- Plantar warts, 424
- Podofilox, in genital warts, 411–413
- Podophyllin, in genital warts, 411–412
- Polymerase chain reaction, in human papillomavirus infections, 278, 281–283
 on archive tissues, 295
 versus in situ hybridization, 298–299
 in telomerase detection, 370–371
 reverse transcriptase, in human telomerase reverse transcriptase detection, 372
- PreservCyt transport media, for human papillomavirus specimens, 280
- Probes, in in situ hybridization, 291–292
 for control, 293–294
- Rate ratio, in statistical studies, of human papillomavirus association with cervical cancer, 347
- Relative risk, in statistical studies, of human papillomavirus association with cervical cancer, 346–347
- Retinoids, in human papillomavirus infections, 417–418
- Reverse transcriptase polymerase chain reaction, in human telomerase reverse transcriptase detection, 372
- Ribozymes, in human papillomavirus, 416–417
- Risk ratio, in statistical studies, of human papillomavirus association with cervical cancer, 347
- RNA, human telomerase reverse transcriptase, detection of, 371–375
- Salicylic acid, in wart removal, 428
- Serologic tests, for human papillomavirus infections, 276–277
- Sex hormones, human papillomavirus infections and, 399–400, 415–417
- Sexual behavior, in human papillomavirus transmission, modification of, 417
 statistical issues in, 352
 versus cervical cancer risk, 264
- Signal amplification method, in human papillomavirus infections, 279–281
- Skin, warts of. See *Warts, nongenital*.
- Skin tags, human papillomavirus in, 244
- Smoking, cervical cancer risk in, 264
- Soft fibromata, human papillomavirus in, 244
- Southern blot test, in human papillomavirus infections, 277
 in telomerase detection, 370
- Speculoscopy, in low-grade squamous intraepithelial lesion, 335
- Statistical issues, in human papillomavirus testing. See *Human papillomavirus infections, tests for, statistical issues in*.
- Target amplification tests, in human papillomavirus infections, 281–283
- Telomerase, In cervical cancer, 369–382
 cervical specimen studies in, 375–379
 human papillomavirus interactions with, 378–379
 telomerase detection methods in, 370–375
- Telomerase repeat amplification protocol, 370–371
- Terminal restriction fragment analysis, in telomerase detection, 370
- Transplantation, warts in, 426–427
- Trichloroacetic acid, for wart removal,
 genital, 413
 nongenital, 428
- Tyramide signal amplification, in in situ hybridization, 292
- Uterus, endometrial cells from, in Pap smear, 322
- Vaccines, for human papillomavirus, 416–417
- Verrucae. See *Warts*.
- Vitamin supplements, in human papillomavirus infections, 417
- Vulvar intraepithelial neoplasia, in HIV infection, 415
- Warts, genital, diagnosis of, 410
 epidemiology of, 407
 human papillomavirus in, 238, 241, 272–273
 pathogenesis of, 408–410
 transmission of, 246–247
 treatment of, antiestrogens in, 415–416

- combination therapies in, 416-417
 - dietary, 417-418
 - future of, 415-418
 - in HIV infection, 415
 - options for, 410-411
 - preventive, 417
 - suboptimal, 408, 410
 - vaccines in, 416-417
 - warts, 411-413
- in epidermodysplasia verruciformis, 242, 427
- nongenital, 423-430
- classification of, 423-424
 - diagnosis of, 424
 - differential diagnosis of, 424
 - epidemiology of, 424-426
 - human papillomavirus in, 238-242
 - in immunodeficiency, 426-427
 - natural history of, 426
 - number of, 425-426
 - risk factors for, 425
 - transmission of, 246, 425
 - treatment of, 427-429
- World Health Organization, cervical intraepithelial neoplasia classification of, 274

