Cambridge University Press 978-0-521-88804-2 - Mohs Surgery and Histopathology: Beyond the Fundamentals Edited by Ken Gross and Howard K. Steinman Index More information

Index

acantholytic processes, 96 acantholytic squamous cell carcinoma, 111 acne conglobata, 109 actinic keratosis, 104-105, 133 adenoid cystic carcinoma, 106 adhesive (cartilage) slides, 54 aerodigestive tract verrucous carcinoma, 113 aggressive growth basal cell carcinomas, 99 albinism, 96 alcohol, presurgical discontinuance, 13 algorithm for viewing multiple step sections, 87 alpha-2b interferon, 3 American Academy of Dermatology, 131, 161 American College of Mohs Surgery, 161 American Joint Committee on Cancer (AJCC), 131 American Society for Dermatological Surgery, 161 American Society for Mohs Surgery, 161 anatomic maps (preprinted), 138 angioleiomyomas, 126 angiosarcoma, 118, 125-126 angling, of specimen block, 45 anticoagulants, presurgical discontinuance, 13 apocrine gland neoplasm. See extramammary Paget's disease A-slides (for cartilage), 54 aspirin, presurgical discontinuance, 13 assessments. See also Mohs microscope global, of tissue for preparation, 21 of margins, 3-5 architectural/spatial factors, 86 epithelial, 78-79 incorrect/incomplete, 21 peripheral, pre-staining, 63 pathological slides, 4 atypical basaloid neoplasms, 96 atypical fibroxanthoma (AFX), 124-125 atypical melanocytosis, 85 banal neoplasms, 96

basal cell carcinoma (BCC), 86

aggressive growth BCCs, 99 described/associations, 96 differential diagnosis, 104-106, 119-120 differentiated BCCs, 100 differentiation from follicles, 88 fibroepithelioma of Pinkus, 103 follicular BCC, 102 histopathology of, 97 infiltrative growth BCC, 99, 103 infundibulocystic BCC, 101-102 keratotic BCC, 100-101 metatypical BCC, 99 micronodular BCC, 98-99 Mohs surgery histologic considerations, 107-108 morpheaform BCC, 99 nevoid BCC (basal cell nevus) syndrome, 96-97, 104 nodular BCC, 69-72, 98, 103 pathogenesis of, 103-104 perineural tumors and, 144 pleomorphic BCC, 102 recurrent BCC, 103 risk factors, 96 with sebaceous differentiation, 102-103 superficial BCC, 80, 97, 103 with sweat duct differentiation, 102 undifferentiated BCC, 97 UVL-induced mutagenesis/biologic transformation, 104 basal cell carcinoma (BCC), differential diagnosis, 104-107 vs. actinic keratoses, 104-105 vs. Bowen's disease, 104 vs. morpheaform BCC, 106 vs. nodular BCC, 105 vs. sebaceous carcinomas, 106 vs. seborrheic keratoses, 104 vs. squamous cell carcinoma, 108 vs. superficial basal cell carcinoma, 104 vs. trichoepitheliomas, 105 basal cell epithelioma with monster cells. See pleomorphic basal

cell carcinoma

Cambridge University Press 978-0-521-88804-2 - Mohs Surgery and Histopathology: Beyond the Fundamentals Edited by Ken Gross and Howard K. Steinman Index More information

178 INDEX

basaloid follicular hamartoma, 102 basaloid hyperplasia, 85 basosquamous carcinoma (metatypical BCC), 97 Bazex-Christol-Dupre syndrome, 96 before surgery map notations, before tissue processing map notations, benign adnexal tumors, 118, 126-128 bisected specimens, 48 bladder carcinoma, 121 blade holder embedding technique, 43 bleeding management, 13-14 blocks (of tissue). See also specimen preparation angling of, 45 cancer evaluation, 69-70 cutting into wafers percentage, 39 "facing the block," 33, 43–44, 63, 68 fatty specimens, 40 first stage embedding, 39-43, 48 freezing of, by technician, 27 influence of shape, 48 specimens processed whole, 48 spraying with liquid nitrogen, 41 subsection misconception about, 3 "total embedding 1" (TEx1 processing), 79–80 "turning the block" (fold avoidance), 72 Bowen's disease, 104, 110, 118 brush technique tips, 47 Buschke Lowenstein tumor, 113, 115 calcific foci, 95 cancers from sun-damaged skin, 85 carcinoma cuniculatum, 112-113 cartilage determination of, in specimens, 21 excision of, 10 relaxing incisions (scoring), 22 vs. fat, 33 prepping specimens with, 41 slide preparation of grossing, 52-54 staining, 54–56 chemical decomposition staining issue, 58 chemical incompatibility staining issue, 58 chromacoding, 4, 23-26. See also inking of specimens ensuring integrity of, 12-13 preparations for, 22 chronic dissecting cellulitis, 109 clear cell hidradenoma, 105 Clearium[®] (Surgipath) coverslip medium, 59 colorectal carcinoma, 121 condylomata acuminata, 96 Coumadin, presurgical dosage modification, 13 coverslipping techniques (for slide preparation), 59 - 61cross-contamination staining issue, 58-59 cryoembedder® device, 31-33 cryomold embedding technique, 32-33, 44 cryomold technique (embedding), 32-33 cryostats, 4, 27-28 inconsistent wafer cutting, 37

sectioning in, 45-47 servicing of, 37 cylindroma, 105 cysts, of hair follicle derivation, 96 Darier's disease, 96 debulking CD-34 IHC stain and, 122-123 decision for, 51 of exophytic tumors, 5 of obvious tumors, 9 using frozen sections, 119 dermal artifacts, 13 dermatofibroma, 96 dermatofibrosarcoma protuberans (DFSP), 118, 122-123 desmoplastic trichoepithelioma, 96, 106 differential diagnosis of actinic keratoses, 104-105 of adnexal neoplasms, 126-127 of atypical fibroxanthoma, 125 of basal cell carcinoma, 104-106, 119-120 of Bowen's disease, 104 of extramammary Paget's disease, 121 of Merkel cell carcinoma, 118 of morpheaform BCC, 106 of nodular BCC, 105 of sebaceous carcinomas, 106, 119-120 of seborrheic keratoses, 104 of squamous cell carcinoma, 108 of superficial basal cell carcinoma, 104 of trichoepitheliomas, 105 differentiated basal cell carcinomas, 100 digital photographs advantages of, 12-13 e-mail review of, 82 of ink outline/reference nicks, 9 of specimens, 12-13, 140, 161 trinocular head camera mount, 16 direct mount embedding technique, 28-30, 43 disadvantages of Mohs surgery, 7, 151 discontiguous (skip) tumors, 4, 89, 135-136 draw method, for picking up wafers, 64 Drosophila patched gene (PTCH), 104 ductal carcinoma, 106 eccrine ducts, 87, 94, 103, 117, 127 eccrine neoplasia vs. BCC, 97 eccrine porocarcinoma in situ, 104 eccrine spiradenoma, 105 electrical artifact minimization, 13-14 embedding/embedding techniques, 43 blade holder technique, 43 cryoembedder® device, 31-33 cryomold technique, 32-33, 44 direct mount technique, 28-30, 43 freeze bar technique, 30, 43 freezing/mounting specimens, 27-28

glass slide technique, 30-32

OCT medium for, 30-33

helpful hints, 44

Cambridge University Press 978-0-521-88804-2 - Mohs Surgery and Histopathology: Beyond the Fundamentals Edited by Ken Gross and Howard K. Steinman Index More information

preparations for, 22 reverse slide, 44 single plane margin placement, 21 tissue cutting, 33 eosin stain. See staining, with hematoxylin and eosin composition of, 58 cross-contamination issue, 52-54 differentiation from hematoxylin stain, 62 overstaining by, 59 pink stain effect on cytoplasm, 57-58 eosin/1% eosin Y, 59 epidermal atrophy, 85 epidermal nevi, 96, 109 epidermolysis bullosa, 109 epithelial margins, 21, 63 mapping designation, 78-79 marking of, 24 peripheral, 72 of stage I specimens, 79 tissue wafer representation, 72 epithelioma cuniculatum, 112-113 erythema ab igne, 109 excisions for optimal sectioning, 3 beveling decisions, 6-7, 10-11, 85-86 cartilage excision, 10 chromacoding on slides, 12-13 curettage prior to stage 1 cancer decision, 5 debulking decisions, 5 deep tumor excisions, 11-12 digital photographs of specimens, 12-13 electrical artifact minimization, 13-14 margin decisions, 5-6, 11 multiple block divisions, 9 "open book" technique, 7-9 specimen orientation maintenance, 9-10 12 o'clock designation determination, 9 exophytic tumors debulking of, 5, 22 papillary SCC, 111 extra tissue nick (ETN), 139 extramammary Paget's disease, 118, 121-122 eyelid tissue preparation, 42-43 fibroepithelioma of Pinkus, 103 5-FU pre-treatment intervention, 88 fixed tissue Mohs, 151 follicular basal cell carcinoma, 102 follicular neoplasia vs. BCC, 97 follicular squamous cell carcinoma, 112 folliculitis, 86 foot melanoma, 132 forms for Mohs surgery dictation outline (3 pages), 161 informed consent documentation, 161 intake/physical/history form, 161 intraoperative worksheet, 161 pathology worksheet, 161 preoperative instruction sheet, 161 referral form, 161

freeze bar embedding technique, 30, 43 fresh-tissue technique (of margin-controlled surgery), 151 genital tissue preparation, 42-43 gentian violet stain, 80, 82, 138 giant cell fibroblastoma (GCF), 123-124 Gill's 1, 2, and 3 hematoxylin, 59, 66 glass slide embedding technique, 30-32 Gorlin-Goltz syndrome (nevoid BCC syndrome), 96-97, 104 granuloma inguinale, 109 granulomas/granulomatous inflammation, 89-94 H&E staining technique, 55, 59 calcific foci, 95 improvement of quality, 59 for melanoma evaluation, 133-135 overstaining corrections, 59 problem categories chemical decomposition, 58 chemical incompatibility, 58 cross-contamination, 58-59 T-blue vs., 157–158 hand melanoma, 132 Harris Hematoxylin stain, 66 hatch marks. See tissue (reference) nicks head melanoma, 132 helix excisions, 10-11 helpful hints for embedding, 44 hemangiomas, 96 hematoxylin stain. See also H&E staining technique blue stain effect on cell nuclei, 57-58 cross-contamination issue, 52-54 differentiation from eosin stain, 62 overstaining by, 59 photosensitivity of, 58 types of, 66 herbal remedies, presurgical discontinuance, 13 hidradenitis suppurativa, 109 histopathology of basal cell carcinoma, 97 of nevoid BCC syndrome, 96-97 of squamous cell carcinoma, 110 T-blue stain and, 155 of verrucous carcinoma, 113-115 vertical vs. horizontal, 107 histotechnicians (histotechs) blade adjustments by, 64 communication with surgeon-pathologist, 14 device development by, 33 "facing the block" by, 68 freezing of tissue blocks, 27 ink placement, when new, 24 lining up/wafer orientation issues, 68 mislabeling errors, 139 open book technique, 7-9 protocols for wafer cutting, 68-69 Sharpie pen slide labeling by, 76 technique evolution of, 33 horizontal sections. See microanatomy of vertical/horizontal

sections

Cambridge University Press 978-0-521-88804-2 - Mohs Surgery and Histopathology: Beyond the Fundamentals Edited by Ken Gross and Howard K. Steinman Index More information

180 INDEX

identifiers for maps, 138 Imiquimod, 3, 88 immunohistochemical stains for BCC surgical margin definition, 108 w/sweat duct differentiation, 102 for melanoma, 132-135 immunohistochemistry (IHC) planning, 77 immunotherapy methods. See alpha-2b interferon; imiquimod infiltrates, acute/chronic inflammatory, 86 infiltrative growth basal cell carcinoma, 99, 103 infinity shaped specimens, 49 inking (chromacoding) of specimens differential inking/TN, 139 importance of correctness, 57 large specimens, in mapping, 78-80 non-epithelial edges, 24 orientation errors, 81-82 possible errors during, 22, 24 pre-/post-subsectioning, 13 prevention of ink bleeding, 57 reference nicks, 24 subdivided specimens, 57 surface inking of deep excision specimens, 80 TEx1 of first specimens, 80 thickening techniques, 57 intraepidermal actinic dysplasia (disorderly maturation with cellular atypia), 85 keratotic basal cell carcinomas, 100-101 laboratory equipment. See cryostats; microtomes Leica[®] Mohs microscope, 15 leiomyosarcoma, 111, 118, 126 lentigo maligna (LM), 129-131 lentigo maligna melanoma (LMM), 129-131 lichen planus, 109 lichen sclerosis, 109 Linistain SLS®, 55 lobular carcinoma, 106 lupus erythematosus, 109 lymphogranuloma venereum, 109 malignant fibrous histiocytoma (MFH), 118, 125 maps/mapping (Mohs maps). See also tissue (reference) nicks angulated resections, 140 annotation, 139-140 determinations accurate tumor mapping, 138 adequate tissue overlap, 141 correct map choice, 138 correct map/correct room, 140 correct tissue excised, 141 margins for excision marked, 140 positive patient area identification, 140 epithelial margin designation, 78 marking histologic findings, 80-81 notations

after slide interpretation, 78 before surgery, 78 before tissue processing, 78 orientation errors, 81-82 section identification, 139 shapes, 78 specimen inking, 79-80 surface/deep excision specimens, 80 staged resections, 139 3-dimensional defect, 140-141 tumors with incomplete excisions, 82 margins assessments of, 3-5 architectural/spatial factors, 86 epithelial, 78-79 incorrect/incomplete, 21 peripheral, prestaining, 63 completeness issues, 63 epithelial margins, 21, 24, 72 evaluation complications, 88 excision decisions, 5-6 intactness, during prep. stage, 21-22 post-stage I issues, 70-71 Marjolin's ulcer, 109 Mayer's I and II Hematoxylin, 66 Medical Chemical Corporation (MCC), 58 medications, discontinuance presurgery, 13 melanocytic nevi, 96 melanoma AJCC staging system, 131 basement membrane material elaboration, 110 clinical evaluation, 129 cutaneous melanoma, 110 head, neck, hands, feet, 132 immunohistochemistry, 133 interpretation, 134-135 lentigo maligna/lentigo maligna melanoma, 129-131 Merkel cell carcinoma vs., 118 Mohs surgery and, 131-133 potential problems, 135-136 spindle cell melanoma, 125 staining protocol, 133-134 use of zinc chloride paste (ZCP), 151 wide local excision guidelines, 131 Merkel cell carcinoma BCC vs., 97, 106 chemotherapy/radiation therapy, 119 differential diagnosis of, 118 histology of, 118-119 surgical options, 119 mesenchymal neoplasms, 111 metatypical basal cell carcinoma, 99 microanatomy of vertical/horizontal sections, 87-95 algorithm for viewing multiple-step sections, 87-88 basal cell carcinoma from follicles (differentiation), 89 hemorrhage, 95 margin evaluation complications, 88 pilosebaceous structure orientation, 87 stromal scars, 89 surgical specimen findings, 89-95

microtomes

blade angle set-up, 64 block processing in, 9, 21, 27

overfacing problem, 24

wafer sectioning in, 22, 27

servicing of, 37

margin precision, 3

tissue sparing, 3

desirable features

binocular, 16 flip out condenser, 16

 $1-2 \times \text{lens}, 16$

Mohs surgery

forms for

setup for slide reading, 17

disadvantages of, 7, 151

fixed-tissue Mohs, 151

referral form, 161

interpretive artifacts, 86

of large, deep tumors, 13

melanoma and, 131-133

misconceptions about, 3-4

wide-Mohs, 129, 133

SCC treatment via, 117

differential diagnosis, 106

Muir-Torre syndrome, 103

Rapini), 4

slow-Mohs, 119, 129, 133

goal/purpose, 5-6

modifications

Mohs microscope

final specimen alignment, 33 gauging blade temperature, 33

maintenance/lubrication of, 33

misconceptions about Mohs surgery, 3

"good enough is good enough," 3

subsectioning of specimens, 3

who and how of performance, 4

adjustment/cleaning schedule, 19

wide angle/focusable eye pieces, 16

slide reading area essentials, 19-20

useful/non-essential features, 16-17

bleeding control during/after, 13-14

dictation outline (3-pages), 161 informed consent documentation, 161

intake/physical/history form, 161

preoperative instruction sheet, 161

histological considerations, 107-108

on incompletely excised lesions, 22

Gil's 1, 2, 3/hematoxylin stain preference, 66

recurrence rate vs. non-Mohs modalities, 103

sandblasting/chemical treatment of chucks, 43

surgical margin slide representation, 23

morpheaform basal cell carcinoma, 97, 99

intraoperative worksheet, 161 pathology worksheet, 161

difficulty of surgery/training needs, 3-4

Cambridge University Press 978-0-521-88804-2 - Mohs Surgery and Histopathology: Beyond the Fundamentals Edited by Ken Gross and Howard K. Steinman Index More information

microcystic adnexal carcinoma, 106, 118, 120, 144

micronodular basal cell carcinoma, 98-99

Index 181

multiple step-sections of three-dimensional tissues, 88 muscle fibers pilar, 87 pyknotic, 95 striated, 95 National Cancer Institute (NCI), 161 neck melanoma, 132 neoplasms. See also basal cell carcinoma (BCC); Merkel cell carcinoma acantholytic squamous cell carcinoma, 111 adnexal neoplasms, 126-128 atypical basaloid neoplasms, 96 atypical fibroxanthoma (AFX), 124-125 banal neoplasms, 96 clear cell hidradenoma, 105 cylindroma, 105 desmoplastic trichoepithelioma, 96, 106 epithelial neoplasms, 106 extramammary Paget's disease, 121-122 mesenchymal neoplasms, 111 metatypical basal cell carcinoma, 99 microcystic adnexal carcinoma, 106, 120 morpheaform basal cell carcinoma, 97, 99 sebaceous, of Muir-Torre syndrome, 103 soft tissue neoplasms, 122 subcutaneous squamous cell carcinoma, 112 verrucous carcinoma, 113 neurofibromata, 96 nevoid BCC (basal cell nevus) syndrome, 96-97, 104 nevus sebaceous nevi, 96, 109 nodular basal cell carcinoma, 69-72, 98, 103 differential diagnosis, 105 OCT embedding medium, 30-33, 156 oddly shaped specimens, 48 Olympus[®] Mohs microscope, 15 "open book" technique, 7-9 oral tissue preparation, 42-43 organization/system-dependence of Mohs surgery, 3 ovarian carcinoma, 121 pagetoid actinic keratosis, 133 papillary squamous cell carcinoma, 111 papillomatosis cutis carcinoids, 112-113 pathological slide assessments, 4 perineural tumors approach to patient, 143 description, 142 evaluation of patient/slide, 146-147 histology/behavior, 144-146 incidence, 142 mechanism/behavior, 143 peripheral nerve anatomy, 142-143 significance of, 142 types/characteristics Mohs Surgery: Fundamentals and Techniques (ed. Gross, Steinman, basal cell carcinoma, 144 microcystic adnexal carcinoma, 144 squamous cell carcinoma, 144 pigmented basal cell carcinomas, 97

Cambridge University Press 978-0-521-88804-2 - Mohs Surgery and Histopathology: Beyond the Fundamentals Edited by Ken Gross and Howard K. Steinman Index More information

182 INDEX

pilar muscle fibers, 87

piloleiomyomas, 126 pilomatricomas, 96 pilosebaceous structures, 86-87, 107 plantar verrucous carcinoma, 112-113 pleomorphic basal cell carcinoma, 102 plus slides (for cartilage), 54 porokeratosis, 96, 109 positive margin excision decisions, 11 positive slides (for cartilage), 54 presurgery decisions, 13 processing specimens with cartilage, 41 complex mucosal tissues, 42-43 with fat, 40-41 laying flat, 39-40 periosteum, 41-42 subdividing, 38-39 whole, 38 prostate carcinoma, 121 protocols for wafer cutting, 68-69 pseudoglandular SCC (acantholytic SCC), 111 pyknotic muscle fibers, 95 quadrisected specimens, 49 Rasmussen syndrome, 96 recurrent basal cell carcinoma, 103 reference nicks. See tissue (reference) nicks relaxing incisions for cartilage, 22, 41, 52 center drawn edge corrections with, 38-39 reference nicks and, 24 for sharply angled corners, 40 renal cell carcinoma, 105 reverse slide embedding technique, 44 Rombo syndrome, 96 scabs on cancer site, 5, 14 sclerosing basal cell carcinoma, 97 sclerosing sweat duct carcinoma. See microcystic adnexal carcinoma sebaceous carcinoma, 119-120 sebaceous neoplasia vs. BCC, 97 seborrheic keratoses, 96, 104 differential diagnosis, 104 shapes of Mohs maps, 78 "Skin Cancer" booklet (National Cancer Institute), 161 slides evaluation/interpretation, 67-77 organization of, 67 slides, preparation of. See also staining; staining, with hematoxylin and eosin with cartilage grossing, 52-54 staining, 54-56 coverslipping techniques, 59-61 staining of specimen, 57-59 without cartilage, 55

slides, troubleshooting quality of margin completeness issue, 63 staining problems erratic slide staining, 65-66 excess eosin, 66 hematoxylin issues, 66 leaking ("pulling out") of eosin, 66 wrinkling and folding issues, 63-65 slow-Mohs (modification), 119, 129, 133 small blue cell tumor. See Merkel cell carcinoma soft tissue neoplasms, 122 specimen preparation. See also embedding techniques angling specimen block, 45 bisected specimens, 48 brush techniques, tips, 47 with cartilage, 41 complex mucosal tissues, 42-43 with fat, 40-41 infinity-shaped specimens, 49 large specimens, 49-50 laving flat, 39-40 oddly shaped specimens, 48 periosteum, 41-42 prep board, 37-38 quadrisected specimens, 49 sectioning in the cryostat, 45-47 square-shaped specimens, 49 subdividing, 38-39 subsequent stages, 50-51 triangular-shaped specimens, 49 wedges, 51-52 whole specimens, 38, 48 Specimen Retrieval Protocol, 37 specimens. See also embedding techniques; microanatomy of vertical/horizontal sections exophytic, debulking of, 5, 22 fat/cartilage determination, 21 flattening of edges, 6 freezing/mounting, 27-28 inking of, 12, 25 making final base cuts, 9 misconceptions about, 3 open book preparation technique, 7-9 orientation of, 21-24 placement for chromacoding, 24 pooled blood, blotting of, 14 processing subdividing, 38-39 whole, 38 retrieval of, 37 of smaller diameter, 6-7 subdivision, use of sharp blades, 23 suture/staple placement, 13 vermillion/helix excision, 10-11 spindle cell melanoma, 125 spindle cell squamous cell carcinoma, 110-111, 125 squamous cell carcinoma (SCC), 13, 80 acantholytic SCC, 111 clinical features, 109-110

Cambridge University Press 978-0-521-88804-2 - Mohs Surgery and Histopathology: Beyond the Fundamentals Edited by Ken Gross and Howard K. Steinman Index More information

cutaneous SCCs, 109 described, 109 differential diagnosis, 115-117 follicular SCC, 112 histopathology, 110 Mohs surgery treatment of, 117 papillary SCC, 111 pathogenesis, 109 risk factors, 109 spindle cell SCC, 110-111 subcutaneous SCC, 112 verrucous carcinoma, 112-113 clinical features, 113 histopathology, 113-115 squamous cell carcinoma (SCC) in situ. See Bowen's disease square shaped specimens, 49 stage I cancer curettage prior to, 5 epidermal/mucosal edges, 6 post-stage I margin issues, 70-71, 74 reference nick determination, 72 specimens quadrisected/inked (fig.), 48 with reference nicks (fig.), 12 trisected/inked (fig.), 49 stage I slides cancer area on wafer (fig.), 75 comparison with later stages, 74 interpretation of, 71 staining with cartilage, 54-56 common problems eosin "pulling out" of tissue wafers, 66 erratic slide staining, 65-66 excess eosin, 66 hematoxylin issues, 66 rinsing of slides, 59 use of timer, 59 without cartilage, 55 staining, with hematoxylin and eosin improvement of quality, 59 overstaining corrections, 59 problem categories chemical decomposition, 58 chemical incompatibility, 58 cross-contamination, 58-59 Stewart-Treves syndrome, 125 striated muscle fibers, 95 stromal scars, 89 subcutaneous squamous cell carcinoma, 112 subsectioning of specimens, 3 sun-damaged skin, 85 atypical basaloid cells in, 87, 104-105 basal cell carcinoma and, 96 isolated atypical melanocytes and, 135 lentigo malignant melanoma and, 129 melanocytic hyperplasia and, 135

Merkel cell carcinoma and, 118 nodular basal cell carcinoma and, 98-104 SCC and, 109 spindle cell SCC and, 110 superficial basal cell carcinoma, 80, 97, 103 differential diagnosis, 104 surgeon-pathologist chromacoding idea individuality, 72 communication with histotechnicians, 14 evaluation/interpretation deep margins, 69-72 of Mohs slides, 41 negative vs. positive margin, 76 peripheral margins, 72 microscope issues, 16-17, 62 protocols for wafer cutting, 68-69 slide organization issues, 67 surgical margin slide representation, 7-9 thin cuts of dermis/epidermis requirement, 41 tissue/tumor evaluation, 86-87 verification of correct biopsy slides, 76 viewing multiple step-sections, 87 viewing tissues in planes, 85-86 wafer slide orientation maintenance by, 33 system-dependence of Mohs surgery, 3 TCA (trichloroacetic acid), 152 thickening of inks, 57 Thompsen-Freidenreich (T) antigen, 105 thyroid carcinoma, 105 tissue freezing medium (TFM), 35, 38, 57 dissolution with tap water, 59 tissue (reference) nicks, 138-139 alternatives to, 80 avoidance of excessiveness, 52 cartilage grossing, 52-53 deep tissues layers/Pac-Man cut, 13 distance decisions, 9 extra tissue nick (ETN), 139 gentian violet stain, 80, 82, 138 importance of visibility, 21 inking of, 24, 79 maintenance of specimen orientation, 139 marking of ends/midpoints in margins, 13 need for clarity of, 9 orientation determination, 9, 68 post-stage I, 72 for subsection demarcation, 14 tissue nicks (TN), 138-139 tissue preparation cutting of tissue, 33 discrepancy resolution, 22 global assessment of specimen, 21 intactness of margins, 21-22 margin plane placement, 22 phases of, 21-24 planned relaxing incisions, 22 specimen manipulation, 22 subdivision determination, 22-23

Cambridge University Press 978-0-521-88804-2 - Mohs Surgery and Histopathology: Beyond the Fundamentals Edited by Ken Gross and Howard K. Steinman Index More information

184 INDEX

Toluidine blue (T-blue) stain advantages of, 156 H&E vs., 157-158 metachromasia phenomenon, 155 problematic areas, 159-160 setup/staining procedure, 156–157 use in basal cell carcinoma, 155, 158 triangular shaped specimens, 49 trichoepithelioma, 101, 105 tumor foci map depiction of location, 78, 80-81 misconception about, 3 red ink marking of, 80 TEx1 processing, 79-80 undifferentiated basal cell carcinoma, 97 urethral carcinoma, 121 uterine carcinoma, 121 UVL-induced mutagenesis/biological transformation of BCC, 104 vermillion/helix excisions, 10-11 verrucous carcinoma clinical features, 113 histopathology, 113-115 vertical sections. See microanatomy of vertical/horizontal sections vitamin E, presurgical discontinuance, 13

wafers in bloody areas, 14 draw method for picking up, 64 inconsistent cutting by cryostat, 37 lining up/orientation issue, 68

multiple, organization of, 26 non-visible inked edges, 24 placement on slides, 33, 42 possible melting of, 33 preparation in direct mount technique, 43 for easier handling, 47 for epidermal/dermal pathology interpretation, 41 for fat representation, 41 with no folding/undulation, 46 in oddly shaped specimens, 48 in reverse slide/cryomold technique, 44 production with complete margins, 39 protocols for cutting, 68-69 "pulling out" by eosin, 66 "tumor free," 88 warts, 96 whole specimens, 38, 48 wide-Mohs (modification), 129, 133 Wood's lamp examination, 129, 136 World Health Organization (WHO), 131-132 wrinkling and folding issues, 63-65

xeroderma pigmentosum, 96

zinc chloride paste (ZCP) application/utilization of, 151 complications of use, contraindications of use, defined, 151 formula for, 151 life span, 151 use in melanoma/tissue fixation, 151