

Temporal Bone Image Library Chapter: Aging

Otopathology Laboratory



Title: Strial Atrophy, R-266 Chapter: Aging Chapter Section: Atrophy of Stria Vascularis

TB Case Number: 1024

Comments: 94 yr. old female with genetically determined, adult onset, sensorineural hearing loss due to stria vascularis atrophy. Her mother had a similar hearing loss. The patient began to lose hearing in her 30s. The audiometric pattern was that of a flat, progressive sensorineural hearing loss.

Gender: Female

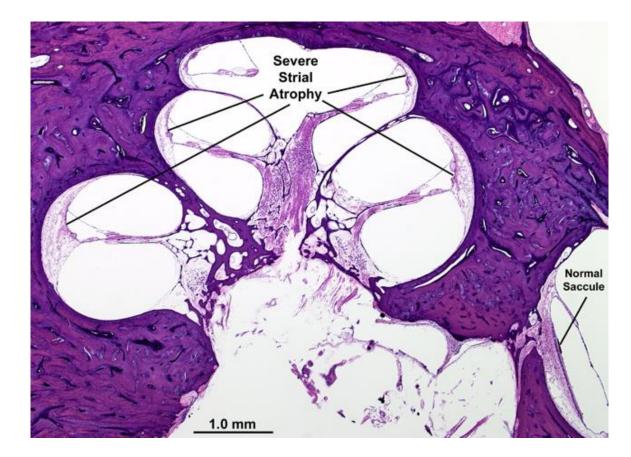
Age (yrs.): 95

Otologic Diagnosis

Clinical:

1. Adult onset, progressive, bilateral sensorineural hearing loss, probably genetic in etiology

- 1. Stria vascularis atrophy, near total, affecting entire cochlear duct, bilateral, probably genetically determined
- 2. Inactive, healed chronic otitis media and mastoiditis with fibrocystic change, bilateral.



Title: Strial Atrophy, R-266

Chapter: Aging

Chapter Section: Atrophy of Stria Vascularis

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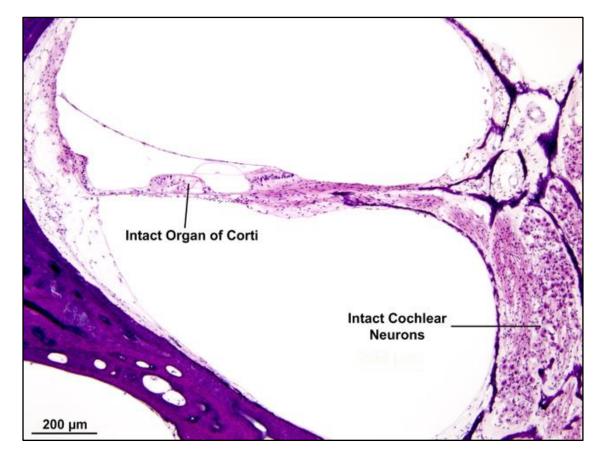
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Title: Strial Atrophy, R-266

Chapter: Aging

Chapter Section: Atrophy of Stria Vascularis

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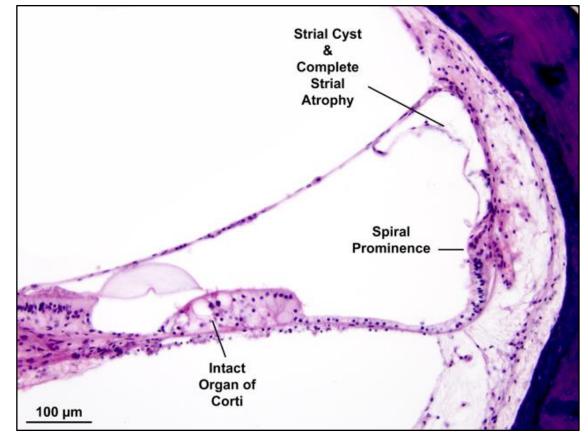
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Chapter: Aging

Chapter Section: Atrophy of Stria Vascularis

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Gender: Female

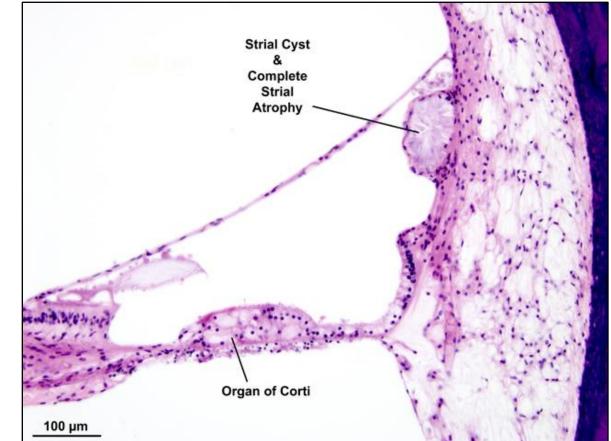
Age (yrs.): 95

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Sensory Presbycusis, R-231

Title: Sensory Presbycusis, R-231

Chapter: Aging

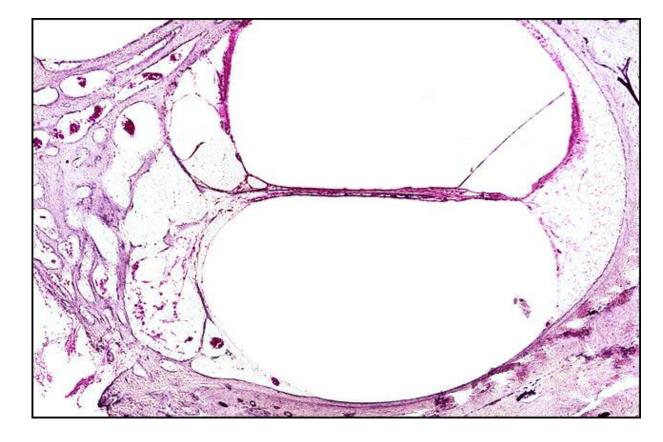
Chapter Section: Presbycusis, Sensory Presbycusis

TB Case Number: 826

Gender: Male

Age (yrs.): 72

- 1. Presbycusis manifested by (a) Stria vascularis, atrophy, apical halves of both cochleae (b) Loss of hair cells of the organ of Corti, basal turn (c) Loss of cochlear neurons, basal turn
- 2. Retraction of Shrapnell's membrane and pars tensa, bilateral, moderate
- 3. Fibrocystic sclerosis, epitympanum and mastoid, left
- 4. Anatomical variant, separation of geniculate ganglion from genu, bilateral
- 5. Artifacts of removal and preparation, moderately severe, bilateral
- 6. Compression artifact, bilateral, most severe on the left



Sensory Presbycusis, R-231

Title: Sensory Presbycusis, R-231

Chapter: Aging

Chapter Section: Presbycusis, Sensory Presbycusis

TB Case Number: 8

Gender: Male

Age (yrs.): 72

- Presbycusis manifested by: (a) Stria vascularis, atrophy, apical halves of both cochleae (b) Loss of hair cells of the organ of Corti, basal turn (c) Loss of cochlear neurons, basal turn
- 2. Retraction of Shrapnell's membrane and pars tensa, bilateral, moderate
- 3. Fibrocystic sclerosis, epitympanum and mastoid, left
- 4. Anatomical variant, separation of geniculate ganglion from genu, bilateral
- 5. Artifacts of removal and preparation, moderately severe, bilateral
- 6. Compression artifact, bilateral, most severe on the left



Sensory Presbycusis (normal area), R-221

Title: Sensory Presbycusis (normal area), R-221

Chapter: Aging

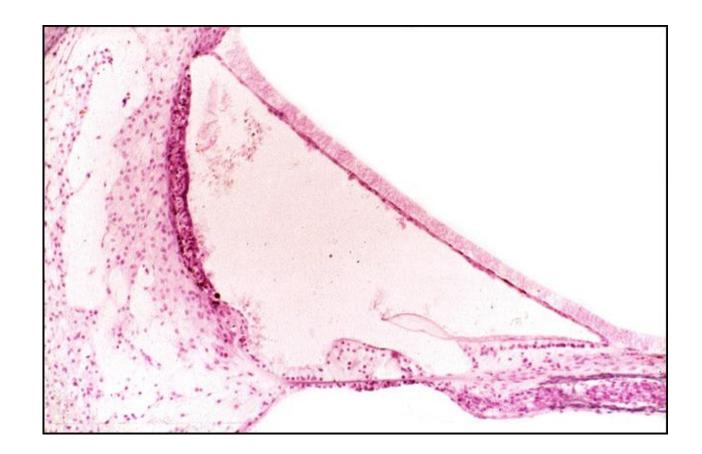
Chapter Section: Presbycusis, Sensory Presbycusis

TB Case Number: 149

Gender: Male

Age (yrs.): 58

- 1. Primary neural degeneration
- 2. Sensory degeneration, basal end of the cochlea



Sensory Presbycusis (normal area), R-221

Title: Sensory Presbycusis (normal area), R-221

Chapter: Aging

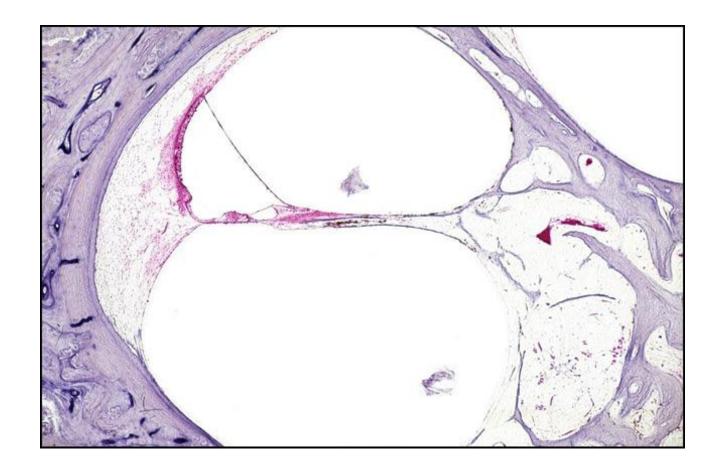
Chapter Section: Presbycusis, Sensory Presbycusis

TB Case Number: 149

Gender: Male

Age (yrs.): 58

- 1. Primary neural degeneration
- 2. Sensory degeneration, basal end of the cochlea



Title: Neural Presbycusis, L-261

Chapter: Aging

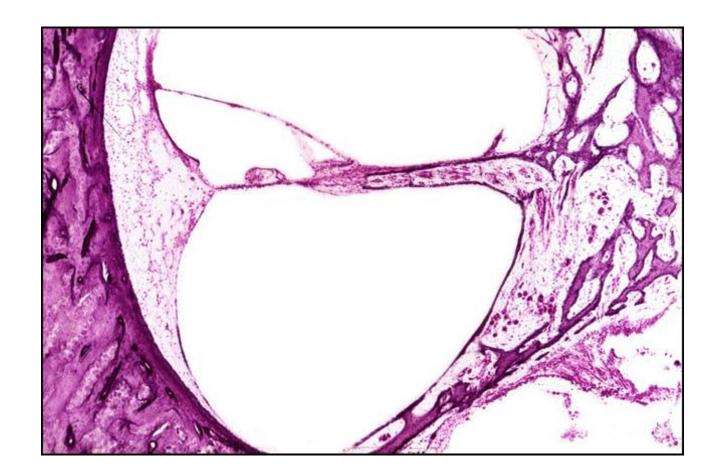
Chapter Section: Neural Presbycusis, Presbycusis

TB Case Number: 368

Gender: Female

Age (yrs.): 63

- 1. Primary cochlear neural degeneration, severe, bilateral
- 2. Normal organs of Corti, bilateral
- 3. Compression artifact, right ear only, severe



Title: Neural Presbycusis, L-171

Chapter: Aging

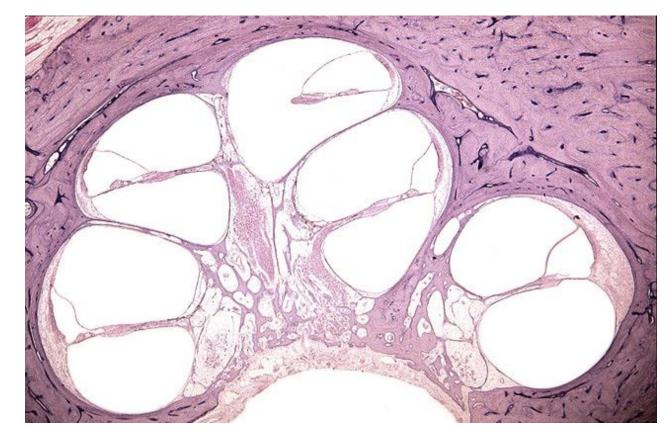
Chapter Section: Neural Presbycusis, Presbycusis

TB Case Number: 99

Gender: Male

Age (yrs.): 81

- 1. Presbycusis, mixed, neural and cochlear conductive
- 2. Acoustic trauma, mild, bilateral
- 3. Artifact, preparation, compression, moderate, right
- 4. Crista, posterior, anomaly, cystic formation, right



Title: Neural Presbycusis, L-241

Chapter: Aging

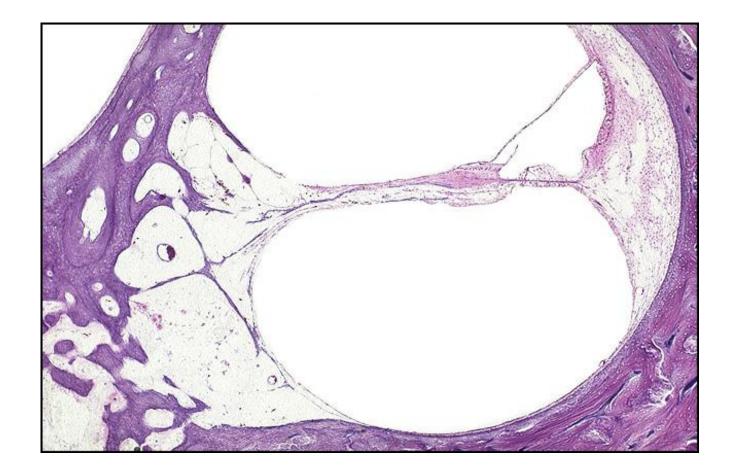
Chapter Section: Neural Presbycusis, Presbycusis

TB Case Number: 350

Gender: Male

Age (yrs.): 75

- 1. Neuronal atrophy, cochlear, cause undetermined, left
- 2. Descending auditory pattern, cause undetermined, left
- 3. Osteitis, external auditory canal, left
- 4. Organ of Corti, atrophy, bilateral
- 5. Exostosis, external auditory canal, anterior and posterior, right



Title: Neural Presbycusis, L-187

Chapter: Aging

Chapter Section: Neural Presbycusis, Presbycusis

TB Case Number: 220

Gender: Male

Age (yrs.): 86

- 1. Presbycusis, neural, strial and sensory, severe, bilateral
- 2. Fracture, transverse, petrous bone, right
- 3. Stapes, subluxation, trauma, right
- 4. Utricle, tears, trauma, right
- 5. Posterior canal, fibrosis, perilymphatic space, trauma, right
- 6. Bony labyrinth, microfractures, cochlea, trauma, right
- 7. Membranous labyrinth, degeneration, trauma, right
- 8. Artery, aberrant, posterior wall petrous bone, right



Title: Neural Presbycusis, L-210

Chapter: Aging

Chapter Section: Neural Presbycusis, Presbycusis

TB Case Number: 844

Gender: Female

Age (yrs.): 89

- 1. Presbycusis, bilateral, characterized by atrophy of the stria vascularis and mild cochlear neuronal atrophy
- 2. Collapse of the cochlear duct and saccule right ear, antemortem, cause unknown



Title: Strial Presbycusis, R-241

Chapter: Aging

Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 222

Gender: Female

Age (yrs.): 72

- 1. Presbycusis, combined, strial (42% loss) and cochlear conductive
- 2. Otosclerosis, without stapes fixation (histologic), left
- 3. Sclerosis, fibrocystic, tympanomastoid compartment, inactive, left
- 4. Epidermization, partial, tympanic cavity, left
- 5. Tympanosclerosis, tympanic cavity, left
- 6. Osteitis, resorptive, ossicles, partial, left
- 7. Artery, internal carotid, dilated, thinning, bilateral
- 8. Artifact, removal, external canal and tympanic membrane, tearing and amputation, bilateral



Title: Strial Presbycusis, R-181

Chapter: Aging

Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 222

Gender: Female

Age (yrs.): 72

- 1. Presbycusis, combined, strial (42% loss) and cochlear conductive
- 2. Otosclerosis, without stapes fixation (histologic), left
- 3. Sclerosis, fibrocystic, tympanomastoid compartment, inactive, left
- 4. Epidermization, partial, tympanic cavity, left
- 5. Tympanosclerosis, tympanic cavity, left
- 6. Osteitis, resorptive, ossicles, partial, left
- 7. Artery, internal carotid, dilated, thinning, bilateral
- 8. Artifact, removal, external canal and tympanic membrane, tearing and amputation, bilateral



Title: Strial Presbycusis, R-212

Chapter: Aging

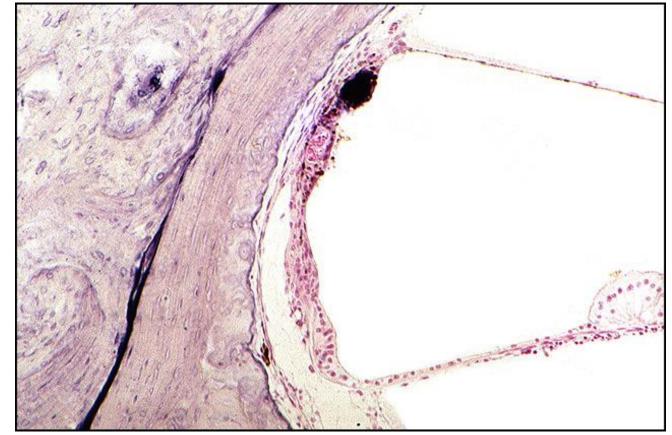
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 222

Gender: Female

Age (yrs.): 72

- 1. Presbycusis, combined, strial (42% loss) and cochlear conductive
- 2. Otosclerosis, without stapes fixation (histologic), left
- 3. Sclerosis, fibrocystic, tympanomastoid compartment, inactive, left
- 4. Epidermization, partial, tympanic cavity, left
- 5. Tympanosclerosis, tympanic cavity, left
- 6. Osteitis, resorptive, ossicles, partial, left
- 7. Artery, internal carotid, dilated, thinning, bilateral
- 8. Artifact, removal, external canal and tympanic membrane, tearing and amputation, bilateral



Title: Strial Presbycusis, L-211

Chapter: Aging

Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 707

Gender: Male

Age (yrs.): 72

- 1. Otosclerosis, bilateral
- 2. Stapedectomy followed by revision stapedectomy, right
- 3. Degeneration of organ of Corti, cochlear neurons, stria vascularis, secondary to stapes surgery, right
- 4. Rupture of the saccule caused by surgical trauma
- 5. Presbycusis, strial atrophy, severe



Title: Strial Presbycusis, L-211

Chapter: Aging

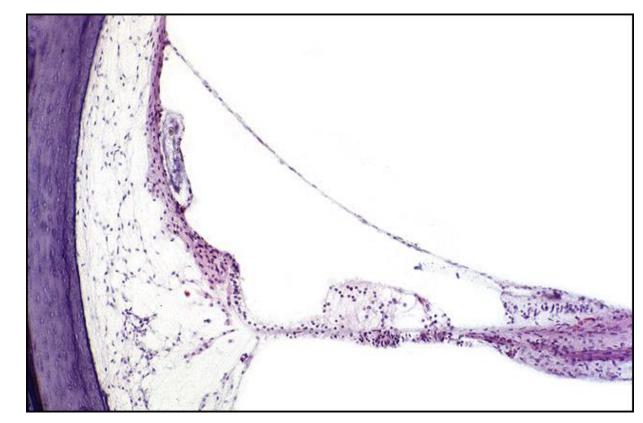
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 707

Gender: Male

Age (yrs.): 72

- 1. Otosclerosis, bilateral
- 2. Stapedectomy followed by revision stapedectomy, right
- 3. Degeneration of organ of Corti, cochlear neurons, stria vascularis, secondary to stapes surgery, right
- 4. Rupture of the saccule caused by surgical trauma
- 5. Presbycusis, strial atrophy, severe



Title: Strial Presbycusis, L-211

Chapter: Aging

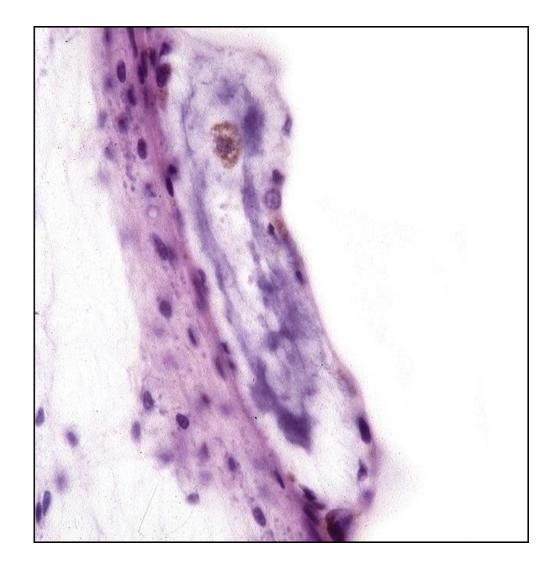
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 707

Gender: Male

Age (yrs.): 72

- 1. Otosclerosis, bilateral
- 2. Stapedectomy followed by revision stapedectomy, right
- 3. Degeneration of organ of Corti, cochlear neurons, stria vascularis, secondary to stapes surgery, right
- 4. Rupture of the saccule caused by surgical trauma
- 5. Presbycusis, strial atrophy, severe



Title: Strial Presbycusis, L-251

Chapter: Aging

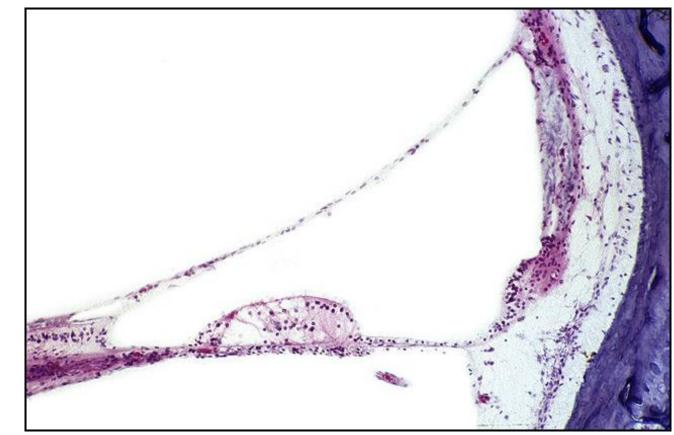
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 707

Gender: Male

Age (yrs.): 72

- 1. Otosclerosis, bilateral
- 2. Stapedectomy followed by revision stapedectomy, right
- 3. Degeneration of organ of Corti, cochlear neurons, stria vascularis, secondary to stapes surgery, right
- 4. Rupture of the saccule caused by surgical trauma
- 5. Presbycusis, strial atrophy, severe



Title: Strial Presbycusis, L-251

Chapter: Aging

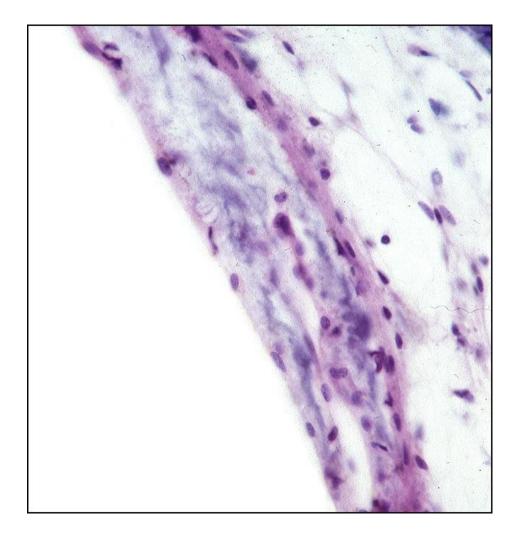
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 707

Gender: Male

Age (yrs.): 72

- 1. Otosclerosis, bilateral
- 2. Stapedectomy followed by revision stapedectomy, right
- 3. Degeneration of organ of Corti, cochlear neurons, stria vascularis, secondary to stapes surgery, right
- 4. Rupture of the saccule caused by surgical trauma
- 5. Presbycusis, strial atrophy, severe



Title: Cochlear Conductive Presbycusis, L-259

Chapter: Aging

Chapter Section: Cochlear Conductive Presbycusis, Presbycusis

TB Case Number: 321

Gender: Male

Age (yrs.): 91

Otologic Diagnosis:

Presbycusis, cochlear conductive type, manifested by descending threshold pattern, left



Title: Cochlear Conductive Presbycusis, L-259

Chapter: Aging

Chapter Section: Cochlear Conductive Presbycusis, Presbycusis

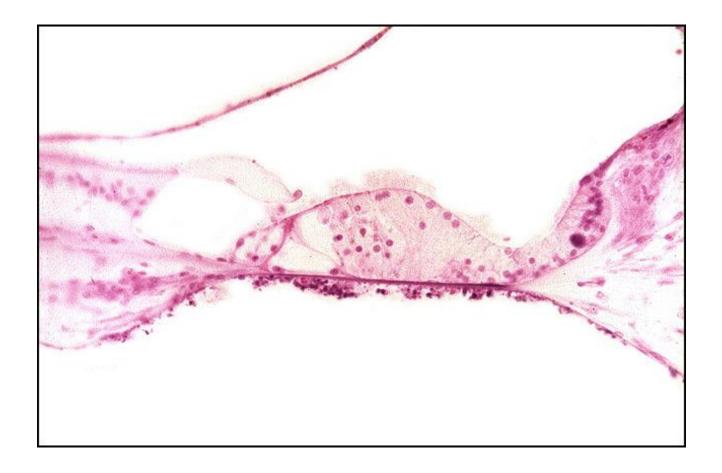
TB Case Number: 321

Gender: Male

Age (yrs.): 91

Otologic Diagnosis:

Presbycusis, cochlear conductive type, manifested by descending threshold pattern, left



Title: Cochlear Conductive Presbycusis, R-253

Chapter: Aging

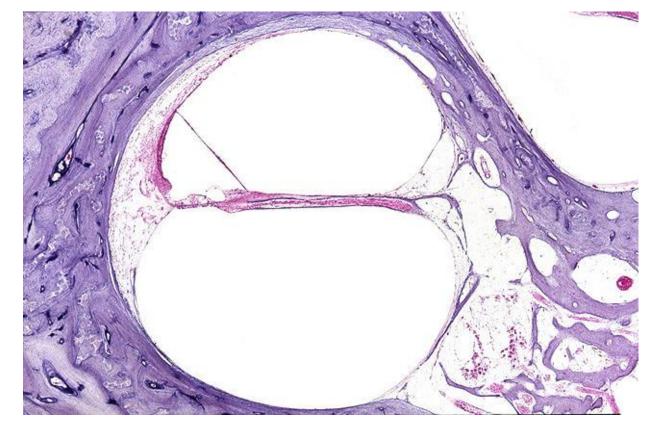
Chapter Section: Cochlear Conductive Presbycusis, Presbycusis

TB Case Number: 385

Gender: Male

Age (yrs.): 87

- Presbycusis, mixed type, characterized by degenerative changes in the stria vascularis, organ of Corti, and cochlear neurons, bilateral
- 2. Arachnoid cyst, internal auditory canal, small, without pressure atrophy of nerves, left



Title: Cochlear Conductive Presbycusis, R-253

Chapter: Aging

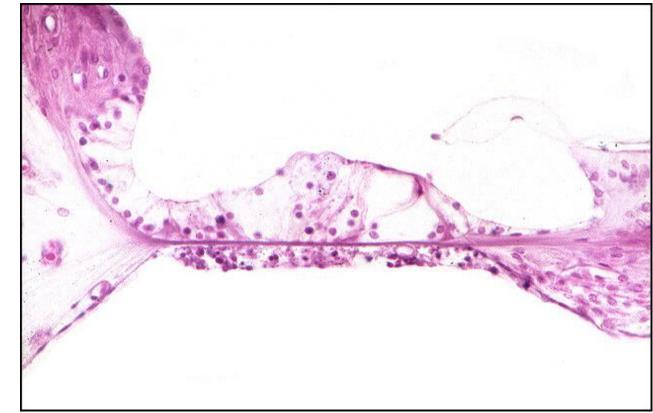
Chapter Section: Cochlear Conductive Presbycusis, Presbycusis

TB Case Number: 385

Gender: Male

Age (yrs.): 87

- Presbycusis, mixed type, characterized by degenerative changes in the stria vascularis, organ of Corti, and cochlear neurons, bilateral
- 2. Arachnoid cyst, internal auditory canal, small, without pressure atrophy of nerves, left



Title: Cochlear Conductive Presbycusis, R-170

Chapter: Aging

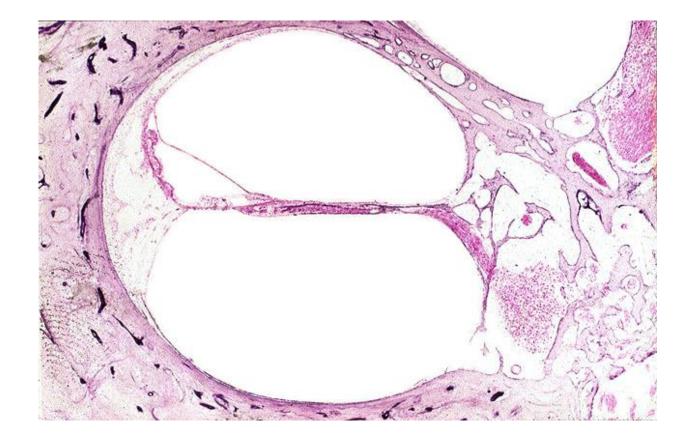
Chapter Section: Cochlear Conductive Presbycusis, Presbycusis

TB Case Number: 192

Gender: Male

Age (yrs.): 53

- 1. Neurofibromatosis 1, no otic manifestations
- 2. Neurofibroma, greater superficial petrosal nerve, small, left
- 3. Sensorineural hearing loss, gradual, descending, bilateral
- 4. Presbycusis, cochlear conductive, mild, presumptive
- 5. Organ of Corti, normal, bilateral
- 6. Paget's disease, late osteoblastic phase, mastoid, mild, left
- 7. Lateral medullary infarct, remote, four years



Title: Cochlear Conductive Presbycusis, R-191

Chapter: Aging

Chapter Section: Cochlear Conductive Presbycusis, Presbycusis

TB Case Number: 371

Gender: Male

Age (yrs.): 96

- 1. Presbycusis, inner ear conductive, right
- 2. Fibrocystic sclerosis, middle ear, presumably due to eustachian tube blockage, left
- 3. Fibrocystic sclerosis, mastoid, presumably due to eustachian tube blockage, left
- 4. Cochleosaccular degeneration, left, presumably due to viral labyrinthitis at age 65
- 5. Arachnoid cysts, internal auditory canals, occult, bilateral
- 6. Paget's disease, petrous bones, inactive, bilateral
- 7. Neural degeneration, vestibular nerve, superior division, bilateral



Title: Cochlear Conductive Presbycusis, R-191

Chapter: Aging

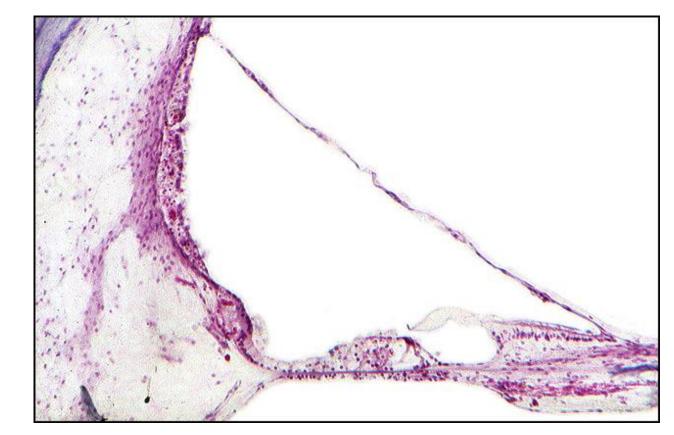
Chapter Section: Cochlear Conductive Presbycusis, Presbycusis

TB Case Number: 371

Gender: Male

Age (yrs.): 96

- 1. Presbycusis, inner ear conductive, right
- 2. Fibrocystic sclerosis, middle ear, presumably due to eustachian tube blockage, left
- 3. Fibrocystic sclerosis, mastoid, presumably due to eustachian tube blockage, left
- 4. Cochleosaccular degeneration, left, presumably due to viral labyrinthitis at age 65
- 5. Arachnoid cysts, internal auditory canals, occult, bilateral
- 6. Paget's disease, petrous bones, inactive, bilateral
- 7. Neural degeneration, vestibular nerve, superior division, bilateral



Title: Cochlear Conductive Presbycusis, R-231

Chapter: Aging

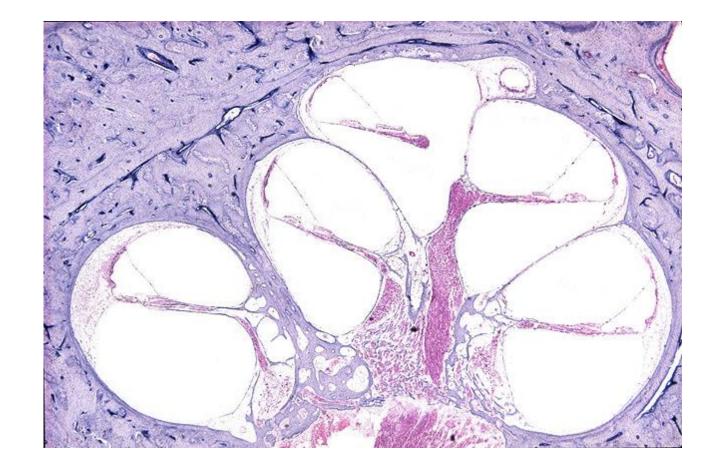
Chapter Section: Cochlear Conductive Presbycusis, Presbycusis

TB Case Number: 413

Gender: Male

Age (yrs.): 83

- 1. Presbycusis, inner ear conductive
- 2. Presbycusis, strial
- 3. Presbycusis, neural
- 4. Utricle, invagination of cuboidal cells containing pigment, undetermined nature, bilateral



Title: Cochlear Conductive Presbycusis, R-231

Chapter: Aging

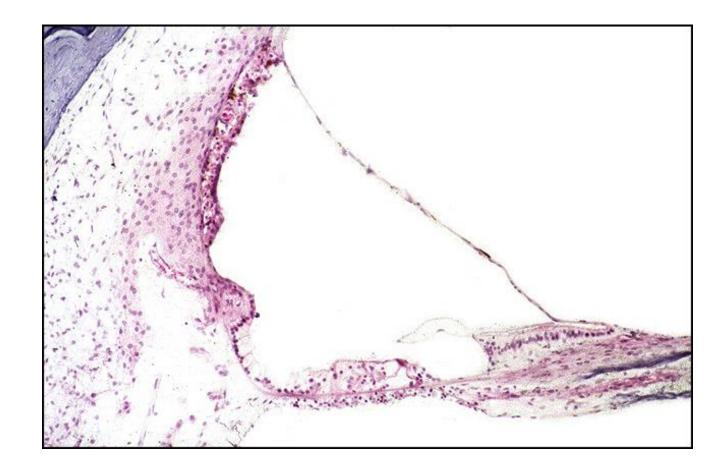
Chapter Section: Cochlear Conductive Presbycusis, Presbycusis

TB Case Number: 413

Gender: Male

Age (yrs.): 83

- 1. Presbycusis, inner ear conductive
- 2. Presbycusis, strial
- 3. Presbycusis, neural
- 4. Utricle, invagination of cuboidal cells containing pigment, undetermined nature, bilateral



Mixed Presbycusis, R-181

Title: Mixed Presbycusis, R-181

Chapter: Aging

Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 13

Gender: Female

Age (yrs.): 81

- 1. Presbycusis mixed, strial and neural
- 2. Facial recess obliteration, bilateral



Mixed Presbycusis, L-181

Title: Mixed Presbycusis, L-181

Chapter: Aging

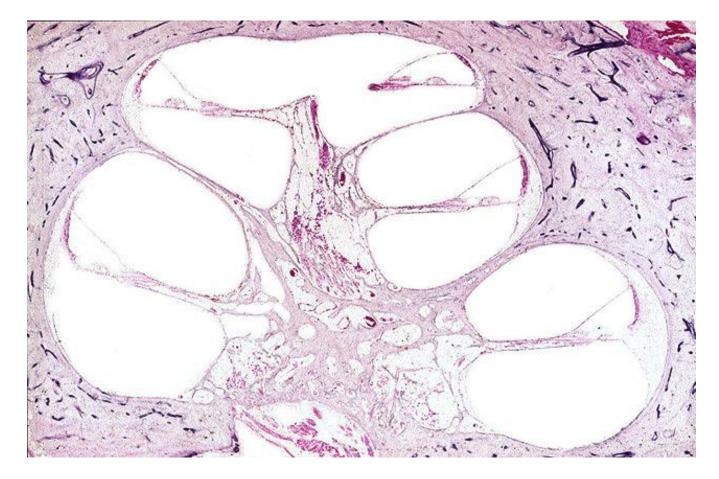
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 411

Gender: Male

Age (yrs.): 82

- 1. Neural degeneration, primary, severe, bilateral
- 2. Organ of Corti, atrophy, basal turn, (presbycusis and acoustic trauma), left



Area of Normal Organ of Corti, L-181

Title: Area of Normal Organ of Corti, L-181

Chapter: Aging

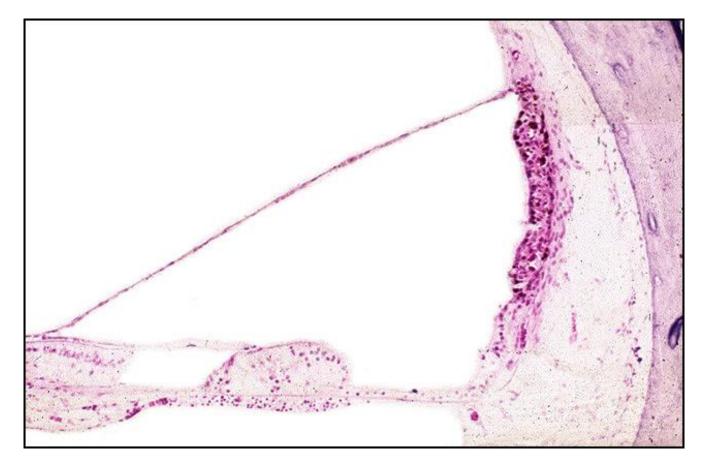
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 411

Gender: Male

Age (yrs.): 82

- 1. Neural degeneration, primary, severe, bilateral
- 2. Organ of Corti, atrophy, basal turn, (presbycusis and acoustic trauma), left



Mixed Presbycusis, L-270

Title: Mixed Presbycusis, L-270

Chapter: Aging

Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 758

Gender: Female

Age (yrs.): 85

- 1. Strial atrophy, moderately severe, bilateral
- 2. Primary neural degeneration, moderate, bilateral
- 3. Sensory cell loss, cochlea, basal turn, cause unknown, left



Mixed Presbycusis, L-190

Title: Mixed Presbycusis, L-190

Chapter: Aging

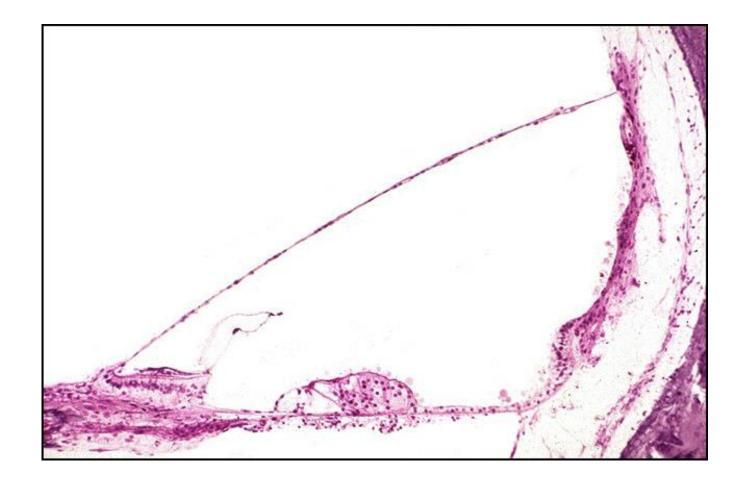
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 758

Gender: Female

Age (yrs.): 85

- 1. Strial atrophy, moderately severe, bilateral
- 2. Primary neural degeneration, moderate, bilateral
- 3. Sensory cell loss, cochlea, basal turn, cause unknown, left



Title: Mixed Presbycusis, R-201

Chapter: Aging

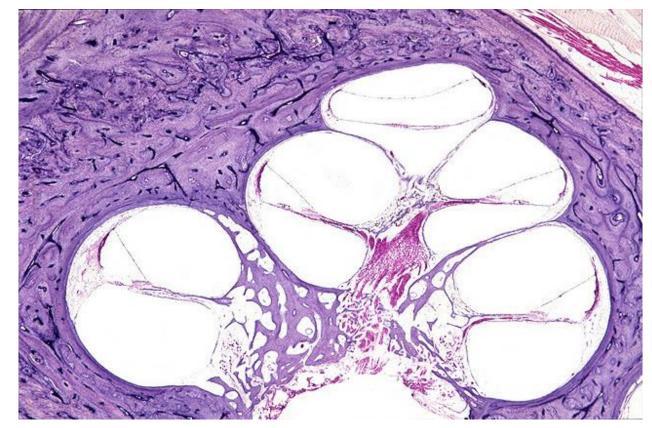
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 510

Gender: Female

Age (yrs.): 96

- Presbycusis, mixed type, characterized by (a) Loss of sensory cells (b) Loss of stria vascularis (c) Loss of neural elements (d) Loss of spiral ganglion
- 2. Paget's disease of the temporal bone, most severe on right (with remodeling into normal lamellar bone)



Title: Mixed Presbycusis, R-201

Chapter: Aging

Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 510

Gender: Female

Age (yrs.): 96

- Presbycusis, mixed type, characterized by (a) Loss of sensory cells (b) Loss of stria vascularis (c) Loss of neural elements (d) Loss of spiral ganglion
- 2. Paget's disease of the temporal bone, most severe on right (with remodeling into normal lamellar bone)



Title: Mixed Presbycusis, R-321

Chapter: Aging

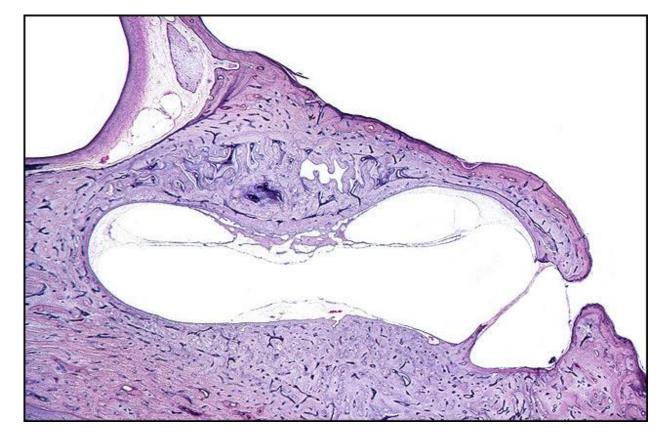
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 193

Gender: Male

Age (yrs.): 95

- 1. Presbycusis, mixed, sensory, neural, and strial types
- 2. Retrograde neuronal degeneration secondary to sensory presbycusis, basal turns, bilateral
- 3. Exostoses, mild, bilateral
- 4. Intratympanic formalin perfusion, post-mortem, bilateral
- 5. Artifact, tympanic membrane, malleus, and incus, associated with postmortem intratympanic formalin perfusion, bilateral
- 6. Normal vestibular sense organs and vestibular nerves



Title: Mixed Presbycusis, R-321

Chapter: Aging

Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 193

Gender: Male

Age (yrs.): 95

- 1. Presbycusis, mixed, sensory, neural, and strial types
- 2. Retrograde neuronal degeneration secondary to sensory presbycusis, basal turns, bilateral
- 3. Exostoses, mild, bilateral
- 4. Intratympanic formalin perfusion, post-mortem, bilateral
- 5. Artifact, tympanic membrane, malleus, and incus, associated with postmortem intratympanic formalin perfusion, bilateral
- 6. Normal vestibular sense organs and vestibular nerves



Title: Mixed Presbycusis, R-211

Chapter: Aging

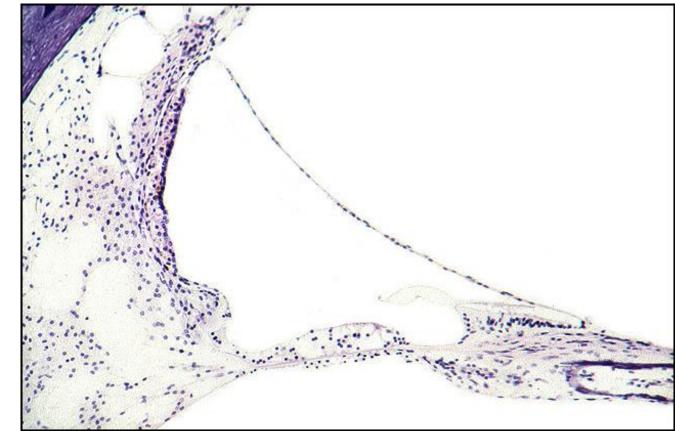
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 193

Gender: Male

Age (yrs.): 95

- 1. Presbycusis, mixed, sensory, neural, and strial types
- 2. Retrograde neuronal degeneration secondary to sensory presbycusis, basal turns, bilateral
- 3. Exostoses, mild, bilateral
- 4. Intratympanic formalin perfusion, post-mortem, bilateral
- 5. Artifact, tympanic membrane, malleus, and incus, associated with postmortem intratympanic formalin perfusion, bilateral
- 6. Normal vestibular sense organs and vestibular nerves



Title: Mixed Presbycusis, R-301

Chapter: Aging

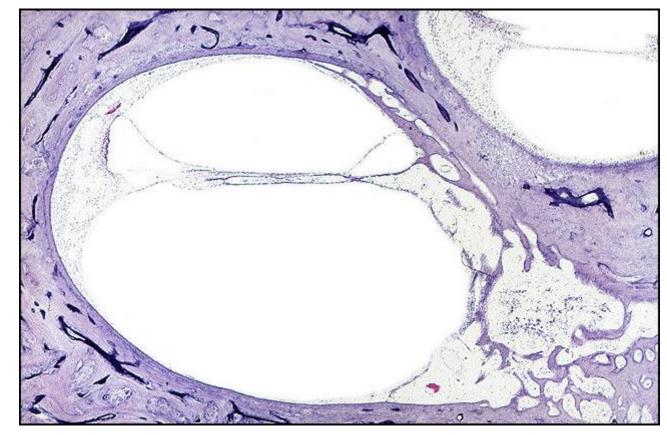
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 193

Gender: Male

Age (yrs.): 95

- 1. Presbycusis, mixed, sensory, neural, and strial types
- 2. Retrograde neuronal degeneration secondary to sensory presbycusis, basal turns, bilateral
- 3. Exostoses, mild, bilateral
- 4. Intratympanic formalin perfusion, post-mortem, bilateral
- 5. Artifact, tympanic membrane, malleus, and incus, associated with postmortem intratympanic formalin perfusion, bilateral
- 6. Normal vestibular sense organs and vestibular nerves



Title: Mixed Presbycusis, L-181

Chapter: Aging

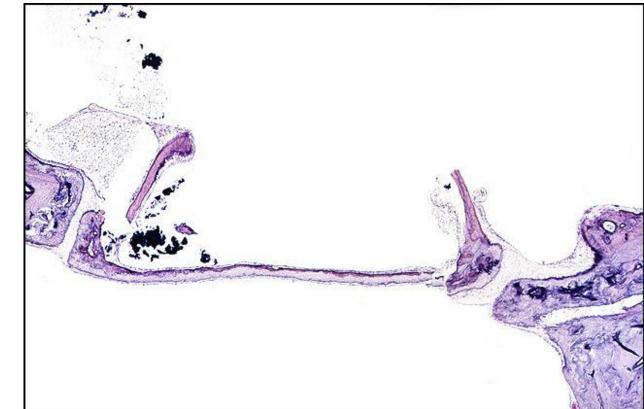
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 193

Gender: Male

Age (yrs.): 95

- 1. Presbycusis, mixed, sensory, neural, and strial types
- 2. Retrograde neuronal degeneration secondary to sensory presbycusis, basal turns, bilateral
- 3. Exostoses, mild, bilateral
- 4. Intratympanic formalin perfusion, post-mortem, bilateral
- 5. Artifact, tympanic membrane, malleus, and incus, associated with postmortem intratympanic formalin perfusion, bilateral
- 6. Normal vestibular sense organs and vestibular nerves



Title: Mixed Presbycusis, L-201

Chapter: Aging

Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 193

Gender: Male

Age (yrs.): 95

- 1. Presbycusis, mixed, sensory, neural, and strial types
- 2. Retrograde neuronal degeneration secondary to sensory presbycusis, basal turns, bilateral
- 3. Exostoses, mild, bilateral
- 4. Intratympanic formalin perfusion, post-mortem, bilateral
- 5. Artifact, tympanic membrane, malleus, and incus, associated with postmortem intratympanic formalin perfusion, bilateral
- 6. Normal vestibular sense organs and vestibular nerves



Title: Mixed Presbycusis, L-201

Chapter: Aging

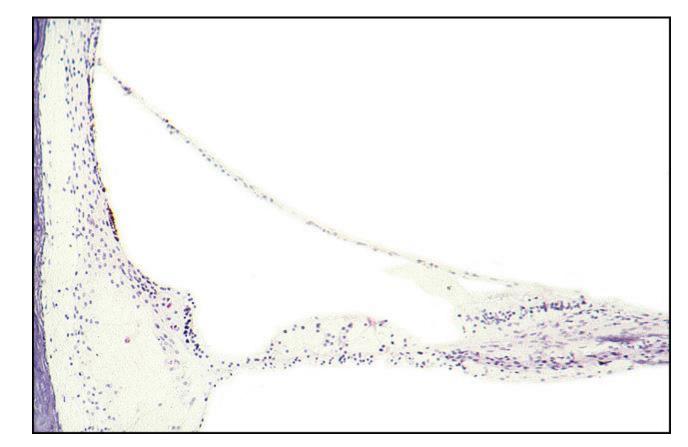
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 193

Gender: Male

Age (yrs.): 95

- 1. Presbycusis, mixed, sensory, neural, and strial types
- 2. Retrograde neuronal degeneration secondary to sensory presbycusis, basal turns, bilateral
- 3. Exostoses, mild, bilateral
- 4. Intratympanic formalin perfusion, post-mortem, bilateral
- 5. Artifact, tympanic membrane, malleus, and incus, associated with postmortem intratympanic formalin perfusion, bilateral
- 6. Normal vestibular sense organs and vestibular nerves



Title: Mixed Presbycusis, L-331

Chapter: Aging

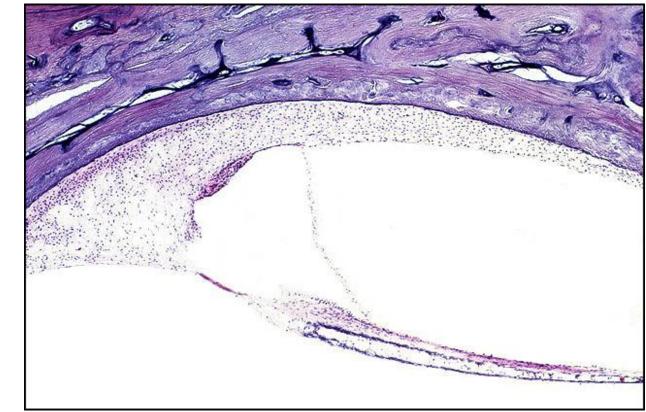
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 193

Gender: Male

Age (yrs.): 95

- 1. Presbycusis, mixed, sensory, neural, and strial types
- 2. Retrograde neuronal degeneration secondary to sensory presbycusis, basal turns, bilateral
- 3. Exostoses, mild, bilateral
- 4. Intratympanic formalin perfusion, post-mortem, bilateral
- 5. Artifact, tympanic membrane, malleus, and incus, associated with postmortem intratympanic formalin perfusion, bilateral
- 6. Normal vestibular sense organs and vestibular nerves



Mixed Presbycusis, Strial, and Conductive, R-201

Title: Mixed Presbycusis, Strial, and Conductive, R-201

Chapter: Aging

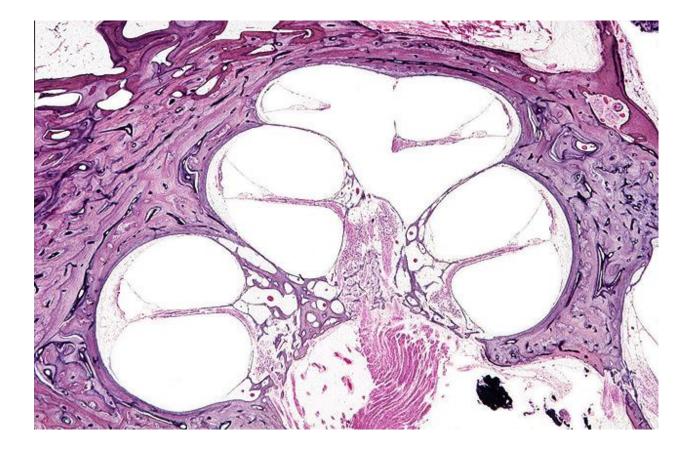
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 65

Gender: Female

Age (yrs.): 73

- 1. Presbycusis, mixed, inner ear conductive and strial atrophy, bilateral
- 2. Artifact, removal, vibratory fragmentation, soft tissue, secondary to saw cut, left
- 3. Spiral ligament, atrophy, apical regions, bilateral



Mixed Presbycusis, Strial, and Conductive, R-201

Title: Mixed Presbycusis, Strial, and Conductive, R-201

Chapter: Aging

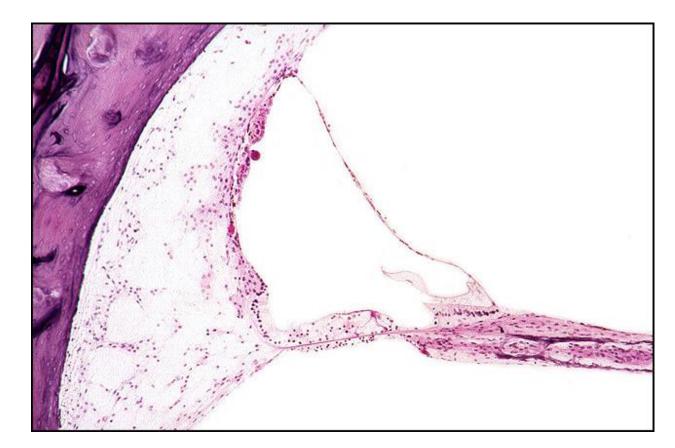
Chapter Section: Mixed Presbycusis, Presbycusis

TB Case Number: 65

Gender: Female

Age (yrs.): 73

- 1. Presbycusis, mixed, inner ear conductive and strial atrophy, bilateral
- 2. Artifact, removal, vibratory fragmentation, soft tissue, secondary to saw cut, left
- 3. Spiral ligament, atrophy, apical regions, bilateral



Title: Mixed Presbycusis, L-171

Chapter: Aging

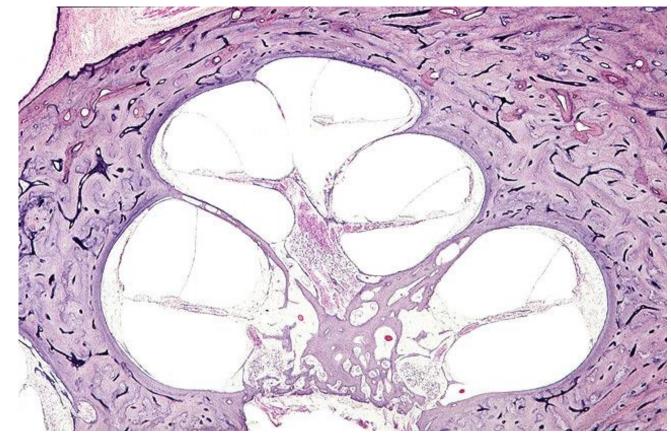
Chapter Section: Indeterminate Presbycusis, Presbycusis

TB Case Number: 887

Gender: Female

Age (yrs.): 87

- 1. Presbycusis, indeterminate
- 2. Stria vascularis, atrophy, apical region, bilateral
- 3. Basilar membrane, thickening, basal end, bilateral
- 4. Endolymphatic hydrops, cochlea, moderately severe, left
- 5. Myringotomy, remote, bilateral
- 6. Vestibulopathy, degenerative, saccule, right
- 7. Saccule, degenerative vestibulopathy, otolithic membrane, right
- 8. Cupulolithiasis, posterior canal, left



Title: Mixed Presbycusis, R-291

Chapter: Aging

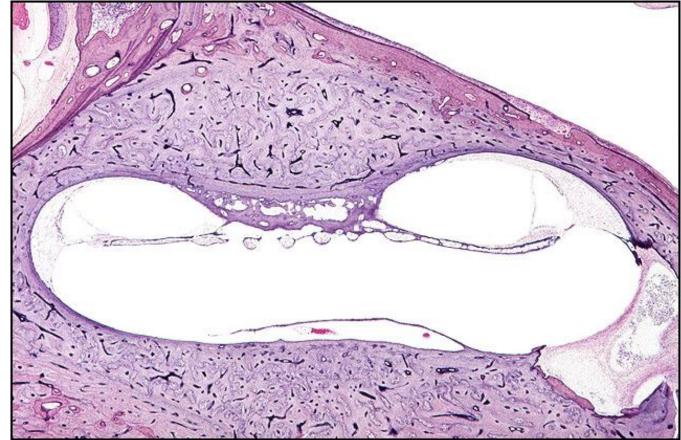
Chapter Section: Indeterminate Presbycusis, Presbycusis

TB Case Number: 887

Gender: Female

Age (yrs.): 87

- 1. Presbycusis, indeterminate
- 2. Stria vascularis, atrophy, apical region, bilateral
- 3. Basilar membrane, thickening, basal end, bilateral
- 4. Endolymphatic hydrops, cochlea, moderately severe, left
- 5. Myringotomy, remote, bilateral
- 6. Vestibulopathy, degenerative, saccule, right
- 7. Saccule, degenerative vestibulopathy, otolithic membrane, right
- 8. Cupulolithiasis, posterior canal, left



Mixed Presbycusis, Thick Basilar Membrane, R-291

Title: Mixed Presbycusis, Thick Basilar Membrane, R-291

Chapter: Aging

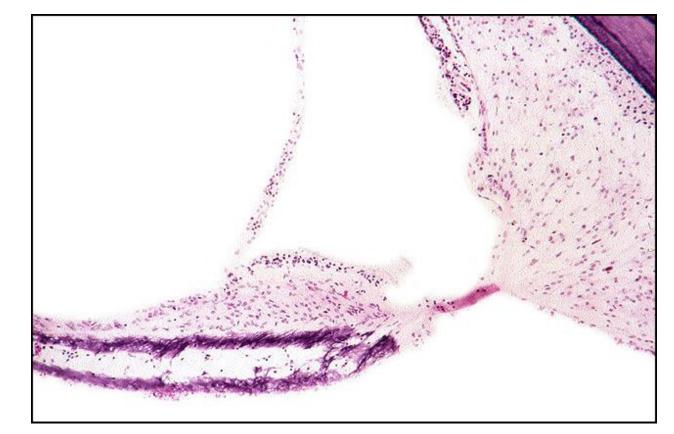
Chapter Section: Indeterminate Presbycusis, Presbycusis

TB Case Number: 887

Gender: Female

Age (yrs.): 87

- 1. Presbycusis, indeterminate
- 2. Stria vascularis, atrophy, apical region, bilateral
- 3. Basilar membrane, thickening, basal end, bilateral
- 4. Endolymphatic hydrops, cochlea, moderately severe, left
- 5. Myringotomy, remote, bilateral
- 6. Vestibulopathy, degenerative, saccule, right
- 7. Saccule, degenerative vestibulopathy, otolithic membrane, right
- 8. Cupulolithiasis, posterior canal, left



Indeterminate Presbycusis, L-131

Title: Indeterminate Presbycusis, L-131

Chapter: Aging

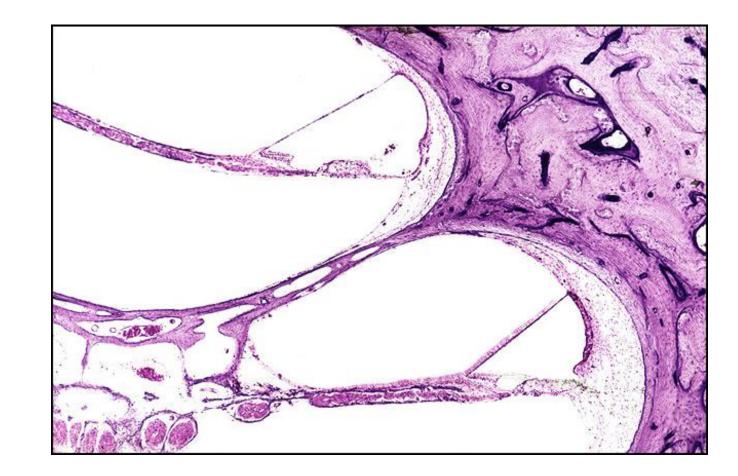
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 645

Gender: Female

Age (yrs.): 67

- 1. Atrophy of the stria vascularis, patchy, apical region of the cochlea
- 2. Developmental defect in the utricular macula
- 3. opening in the posterior semicircular duct, etiology undetermined



Indeterminate Presbycusis, L-141

Title: Indeterminate Presbycusis, L-141

Chapter: Aging

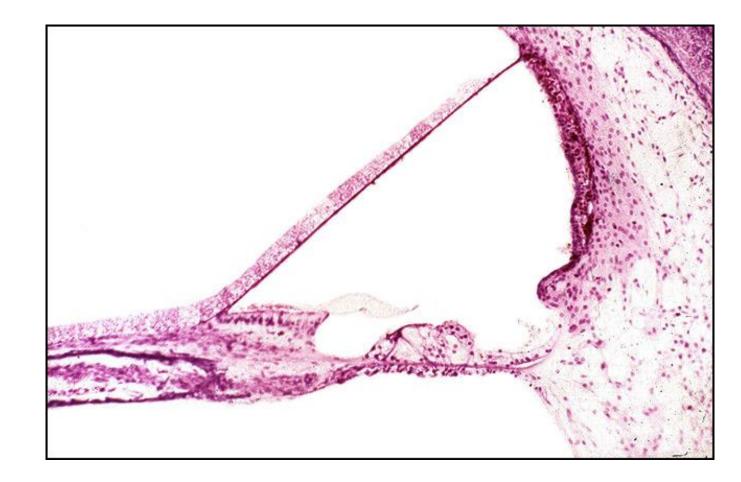
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 645

Gender: Female

Age (yrs.): 67

- 1. Atrophy of the stria vascularis, patchy, apical region of the cochlea
- 2. Developmental defect in the utricular macula
- 3. Opening in the posterior semicircular duct, etiology undetermined



Indeterminate Presbycusus, R-191

Title: Indeterminate Presbycusus, R-191

Chapter: Aging

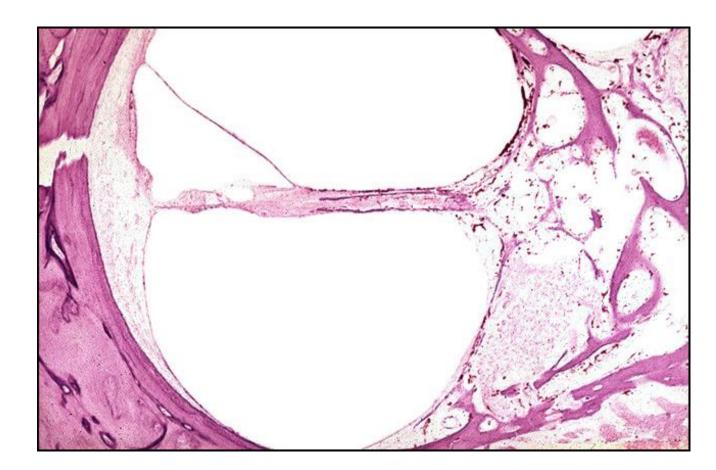
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 38

Gender: Male

Age (yrs.): 89

- 1. Presbycusis, strial, moderately severe, bilateral
- 2. Presbycusis, neural, moderately severe, bilateral
- 3. Acoustic trauma, mild, bilateral
- 4. Compression artifact, moderately severe, left





Indeterminate Presbycusis, R-231

Title: Indeterminate Presbycusis, R-231

Chapter: Aging

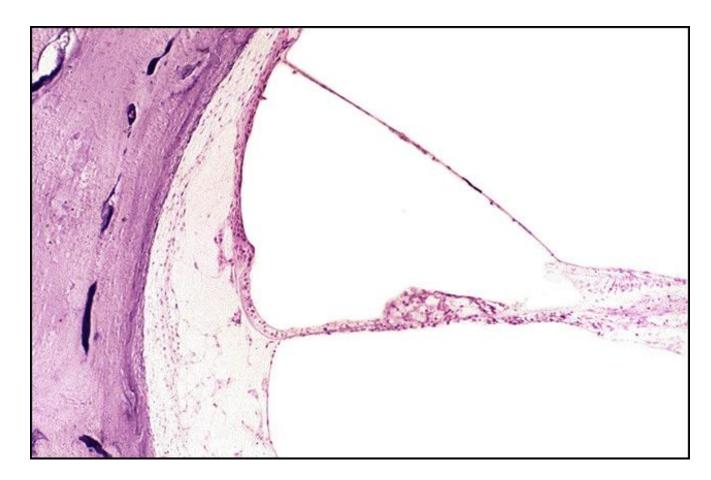
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 38

Gender: Male

Age (yrs.): 89

- 1. Presbycusis, strial, moderately severe, bilateral
- 2. Presbycusis, neural, moderately severe, bilateral
- 3. Acoustic trauma, mild, bilateral
- 4. Compression artifact, moderately severe, left



Indeterminate Presbycusis, R-221

Title: Indeterminate Presbycusis, R-221

Chapter: Aging

Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 38

Gender: Male

Age (yrs.): 89

- 1. Presbycusis, strial, moderately severe, bilateral
- 2. Presbycusis, neural, moderately severe, bilateral
- 3. Acoustic trauma, mild, bilateral
- 4. Compression artifact, moderately severe, left



Early Changes in the Spiral Ligament, L-117

Title: Early Changes in the Spiral Ligament, L-117 **Chapter:** Aging

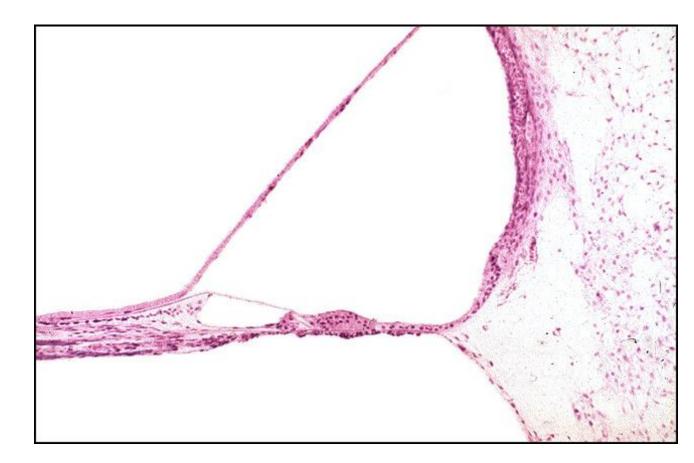
Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 114

Gender: Male

Age (yrs.): 59

- 1. Spiral ligament, atrophy, severe, apical region, left
- 2. Artifact, preparation, rupture, basilar membrane, Reissner's membrane, saccule, left
- 3. Artifact, preparation, compression, membranous labyrinth, left



Atrophy of Stria, L-190

Title: Atrophy of Stria, L-190

Chapter: Aging

Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 57

Gender: Male

Age (yrs.): 62

- 1. Presbycusis, strial
- 2. Conductive hearing loss, middle ear fibrosis, presumptive, right
- 3. Tympanomastoiditis, suppurative, acute, left
- 4. Artifact, removal, external canal, middle ear, bilateral



Atrophy, Spiral Ligament, Apex, L-190

Title: Atrophy, Spiral Ligament, Apex, L-190

Chapter: Aging

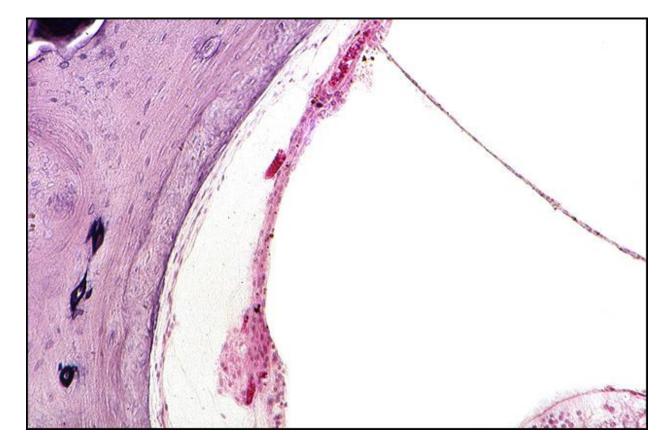
Chapter Section: Presbycusis, Strial Presbycusis

TB Case Number: 57

Gender: Male

Age (yrs.): 62

- 1. Presbycusis, strial
- 2. Conductive hearing loss, middle ear fibrosis, presumptive, right
- 3. Tympanomastoiditis, suppurative, acute, left
- 4. Artifact, removal, external canal, middle ear, bilateral



Title: Spiral Ligament Atrophy, R-206

Chapter: Aging

Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 324

Gender: Female

Age (yrs.): 73

- 1. Atrophy of the spiral ligament, bilateral, with ruptures in the middle and apical turns of the right ear
- 2. Ruptures of the utricle and saccule
- 3. Cupulolithiasis, mild, left ear



Title: Spiral Ligament Atrophy, R-206

Chapter: Aging

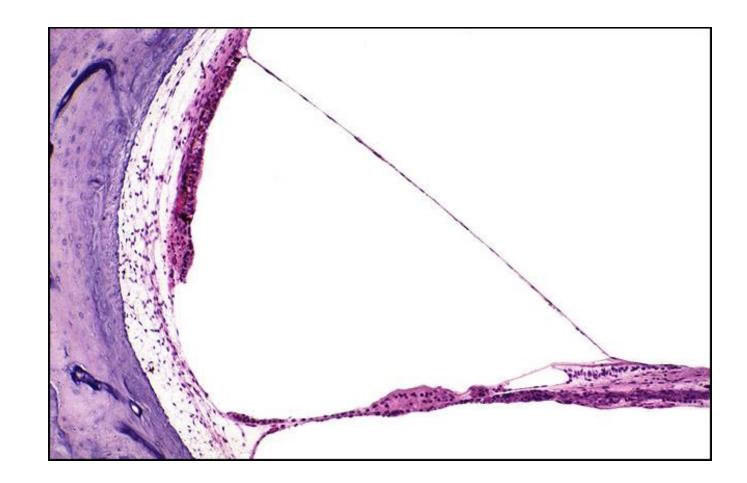
Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 327

Gender: Female

Age (yrs.): 73

- 1. Atrophy of the spiral ligament, bilateral, with ruptures in the middle and apical turns of the right ear
- 2. Ruptures of the utricle and saccule
- 3. Cupulolithiasis, mild, left ear



Title: Spiral Ligament Atrophy, R-206

Chapter: Aging

Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 324

Gender: Female

Age (yrs.): 73

- 1. Atrophy of the spiral ligament, bilateral, with ruptures in the middle and apical turns of the right ear
- 2. Ruptures of the utricle and saccule
- 3. Cupulolithiasis, mild, left ear





Title: Spiral Ligament Atrophy, L-202

Chapter: Aging

Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 462

Gender: Male

Age (yrs.): 87

- 1. Otitis media, chronic suppurative, healed, bilateral
- 2. Mastoiditis, bilateral
- 3. Mastoidectomy, radical, left
- 4. Myringostapediopexy, spontaneous, right
- 5. Partial surgical obliteration of the horizontal canal and subluxation of the stapes, left
- Presbycusis, characterized by (a) Spiral ligament atrophy, primary, severe, apical half, bilateral (b) Tectorial membrane atrophy, primary, severe, apical half, bilateral (c) Stria vascularis atrophy, severe, apical half, bilateral (d) Organ of Corti, atrophy, basal half, bilateral (e) Spiral ganglion, atrophy, basal half, bilateral



Title: Spiral Ligament Atrophy, R-140

Chapter: Aging

Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 462

Gender: Male

Age (yrs.): 87

- 1. Otitis media, chronic suppurative, healed, bilateral
- 2. Mastoiditis, bilateral
- 3. Mastoidectomy, radical, left
- 4. Myringostapediopexy, spontaneous, right
- 5. Partial surgical obliteration of the horizontal canal and subluxation of the stapes, left
- 6. Presbycusis, characterized by (a) Spiral ligament atrophy, primary, severe, apical half, bilateral (b) Tectorial membrane atrophy, primary, severe, apical half, bilateral (c) Stria vascularis atrophy, severe, apical half, bilateral (d) Organ of Corti, atrophy, basal half, bilateral (e) Spiral ganglion, atrophy, basal half, bilateral



Title: Spiral Ligament Atrophy, L-181

Chapter: Aging

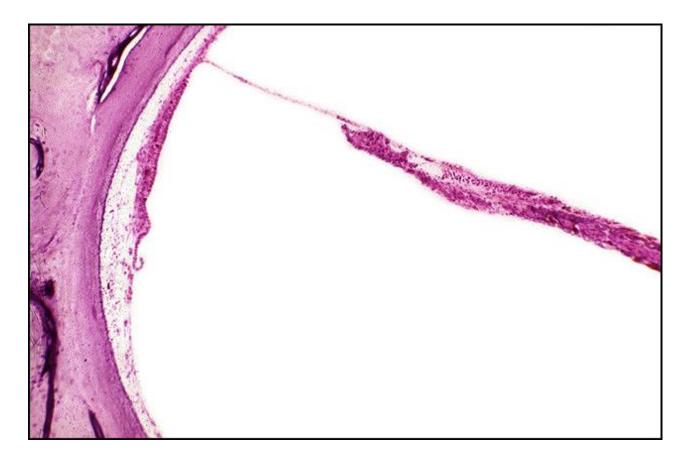
Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 511

Gender: Male

Age (yrs.): 80

- 1. Basilar membrane, atrophy, bilateral
- 2. Presbycusis, bilateral
- 3. Autolysis, postmortem, moderately severe, bilateral



Title: Spiral Ligament Atrophy, R-142

Chapter: Aging

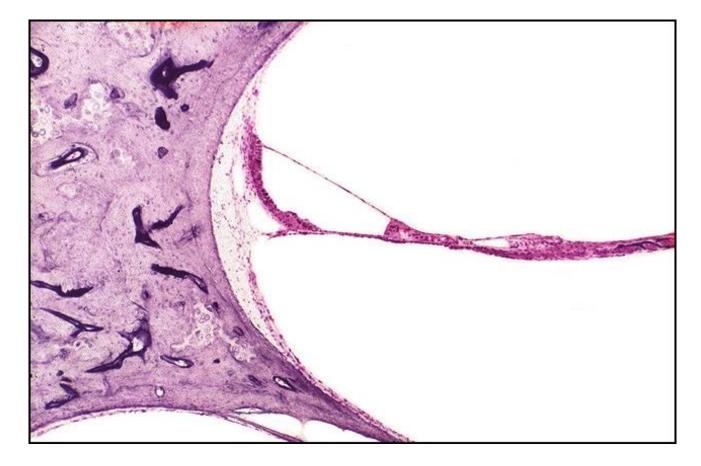
Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 512

Gender: Female

Age (yrs.): 85

- 1. Vestibular neuritis, bilateral
- 2. Facial palsy, (Bell's type with recovery), bilateral
- 3. Spiral ligament, atrophy, bilateral
- 4. Stria vascularis, atrophy, bilateral





Title: Spiral Ligament Atrophy, R-142

Chapter: Aging

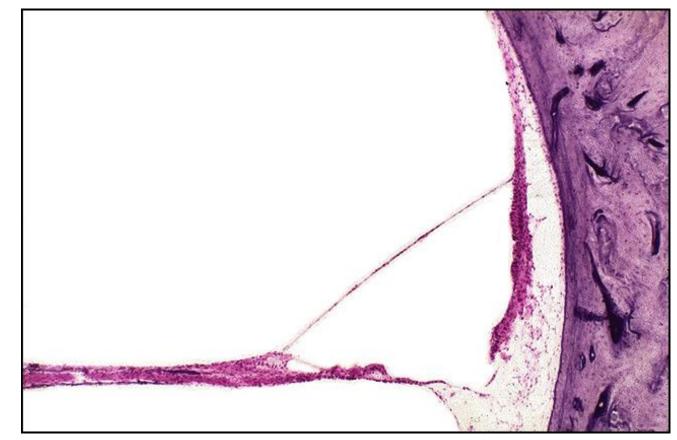
Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 512

Gender: Female

Age (yrs.): 85

- 1. Vestibular neuritis, bilateral
- 2. Facial palsy, (Bell's type with recovery), bilateral
- 3. Spiral ligament, atrophy, bilateral
- 4. Stria vascularis, atrophy, bilateral



Title: Spiral Ligament Atrophy, R-231

Chapter: Aging

Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 511

Gender: Male

Age (yrs.): 80

- 1. Basilar membrane, atrophy, bilateral
- 2. Presbycusis, bilateral
- 3. Autolysis, postmortem, moderately severe, bilateral



Title: Spiral Ligament Atrophy, L-201

Chapter: Aging

Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 391

Gender: Male

Age (yrs.): 36

- 1. Otosclerosis, stapes fixation, bilateral
- 2. Spiral ligament, atrophy, middle and apical turns, bilateral



Title: Spiral Ligament Atrophy, L-201

Chapter: Aging

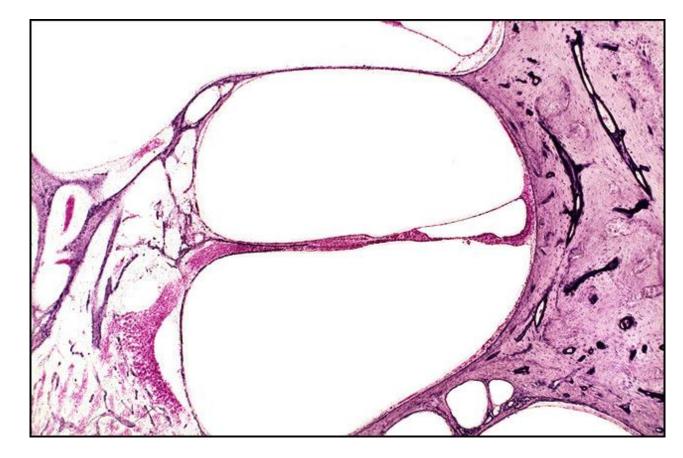
Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 391

Gender: Male

Age (yrs.): 36

- 1. Otosclerosis, stapes fixation, bilateral
- 2. Spiral ligament, atrophy, middle and apical turns, bilateral



Title: Spiral Ligament Atrophy, R-231

Chapter: Aging

Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 667

Gender: Female

Age (yrs.): 75

- 1. Otosclerosis, bilateral
- 2. Stapedectomy, left
- 3. Spiral ligament, atrophy, severe, right
- 4. Neural degeneration, primary, right



Title: Spiral Ligament Atrophy, R-231

Chapter: Aging

Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 667

Gender: Female

Age (yrs.): 75

- 1. Otosclerosis, bilateral
- 2. Stapedectomy, left
- 3. Spiral ligament, atrophy, severe, right
- 4. Neural degeneration, primary, right



Spiral Ligament Atrophy, R-231

Title: Spiral Ligament Atrophy, R-231

Chapter: Aging

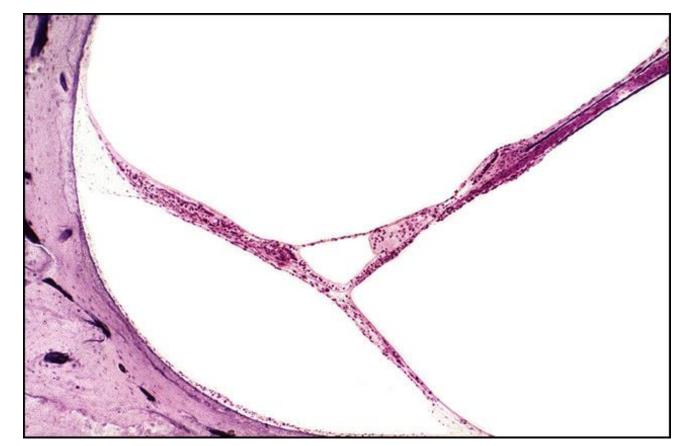
Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 667

Gender: Female

Age (yrs.): 75

- 1. Otosclerosis, bilateral
- 2. Stapedectomy, left
- 3. Spiral ligament, atrophy, severe, right
- 4. Neural degeneration, primary, right



Spiral Ligament Atrophy, L-231

Title: Spiral Ligament Atrophy, L-231

Chapter: Aging

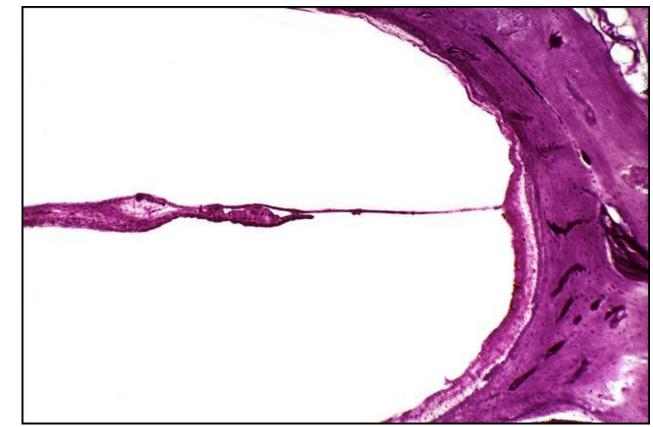
Chapter Section: Presbycusis, Spiral Ligament Atrophy

TB Case Number: 821

Gender: Male

Age (yrs.): 74

- 1. Otosclerosis, clinical, minimal, left ear
- 2. Cochlear duct, rupture, presumed to be an artifact of fixation and preparation
- 3. Fragmentation and creeping artifact of the bony labyrinth, severe, due to over-decalcification



Collapsed Duct, Posterior Canal, L-330

Title: Collapsed Duct, Posterior Canal, L-330

Chapter: Aging

Chapter Section: Disequilibrium of Aging

TB Case Number: 41

Gender: Female

Age (yrs.): 81

- 1. Arachnoid cyst, right
- 2. Vestibular nerves, partial degeneration, right
- 3. Semicircular canal, posterior, collapse, left
- 4. Lymphocytic infiltrates, soft tissues, bilateral
- 5. Otitis media, fibrous and serous, right



Collapsed Duct, Posterior Canal, L-330

Title: Collapsed Duct, Posterior Canal, L-330

Chapter: Aging

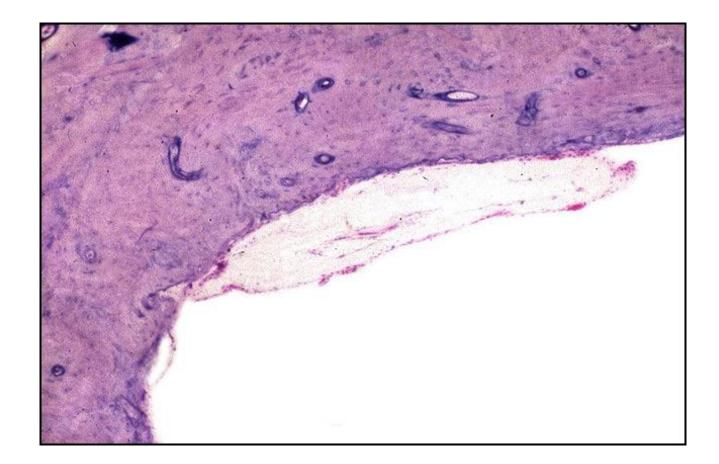
Chapter Section: Disequilibrium of Aging

TB Case Number: 41

Gender: Female

Age (yrs.): 81

- 1. Arachnoid cyst, right
- 2. Vestibular nerves, partial degeneration, right
- 3. Semicircular canal, posterior, collapse, left
- 4. Lymphocytic infiltrates, soft tissues, bilateral
- 5. Otitis media, fibrous and serous, right





Collapsed Semi-Circular Duct, R-157

Title: Collapsed Semi-Circular Duct, R-157

Chapter: Aging

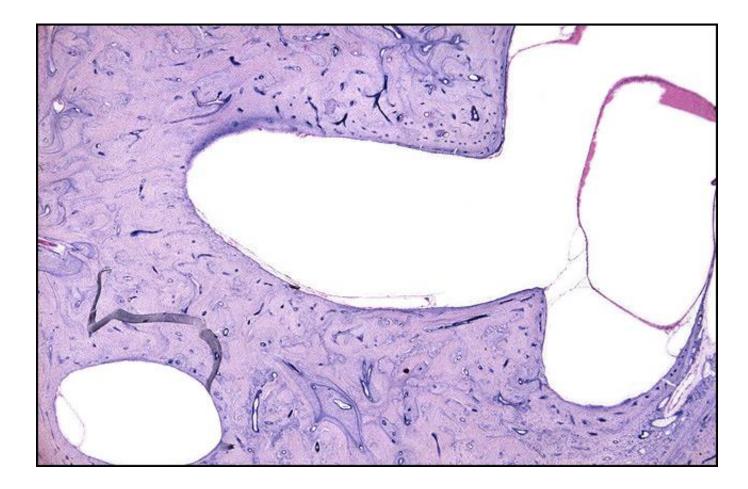
Chapter Section: Disequilibrium of Aging

TB Case Number: 34

Gender: Female

Age (yrs.): 95

- 1. Presbycusis, strial, severe
- 2. Presbycusis, neural, mild
- 3. Compression artifact, moderately severe, bilateral
- 4. Semicircular duct, lateral, collapse, bilateral
- 5. Saccule, collapse, partial, bilateral
- 6. Crista, posterior, cystic changes, right
- 7. Osteoporosis, mastoid, right
- 8. Pigment deposit, melanin, stria vascularis, bilateral
- 9. Reissner's membrane, atrophy, bilateral
- 10. Retraction pocket, attic, left



Collapsed Semi-circular Duct, R-151

Title: Collapsed Semi-circular Duct, R-151

Chapter: Aging

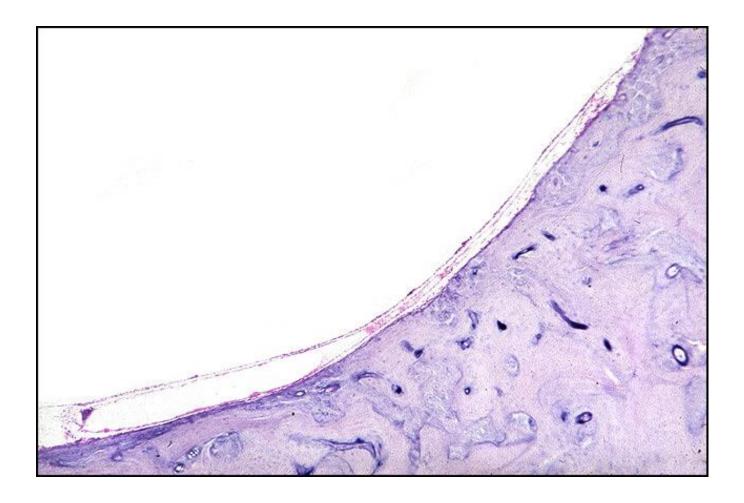
Chapter Section: Disequilibrium of Aging

TB Case Number: 34

Gender: Female

Age (yrs.): 95

- 1. Presbycusis, strial, severe
- 2. Presbycusis, neural, mild
- 3. Compression artifact, moderately severe, bilateral
- 4. Semicircular duct, lateral, collapse, bilateral
- 5. Saccule, collapse, partial, bilateral
- 6. Crista, posterior, cystic changes, right
- 7. Osteoporosis, mastoid, right
- 8. Pigment deposit, melanin, stria vascularis, bilateral
- 9. Reissner's membrane, atrophy, bilateral
- 10. Retraction pocket, attic, left



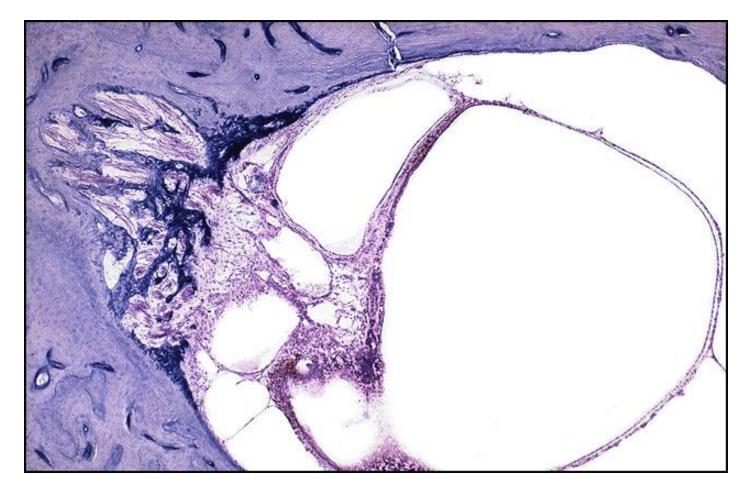
ATR Changes, Post. Crista, Cystic, R-291

Title: ATR changes, Post. Crista, Cystic, R-291 Chapter: Aging Chapter Section: Disequilibrium of Aging TB Case Number: 34

Gender: Female

Age (yrs.): 95

- 1. Presbycusis, strial, severe
- 2. Presbycusis, neural, mild
- 3. Compression artifact, moderately severe, bilateral
- 4. Semicircular duct, lateral, collapse, bilateral
- 5. Saccule, collapse, partial, bilateral
- 6. Crista, posterior, cystic changes, right
- 7. Osteoporosis, mastoid, right
- 8. Pigment deposit, melanin, stria vascularis, bilateral
- 9. Reissner's membrane, atrophy, bilateral
- 10. Retraction pocket, attic, left



Title: Degenerative Vestibulopathy, L-211

Chapter: Aging

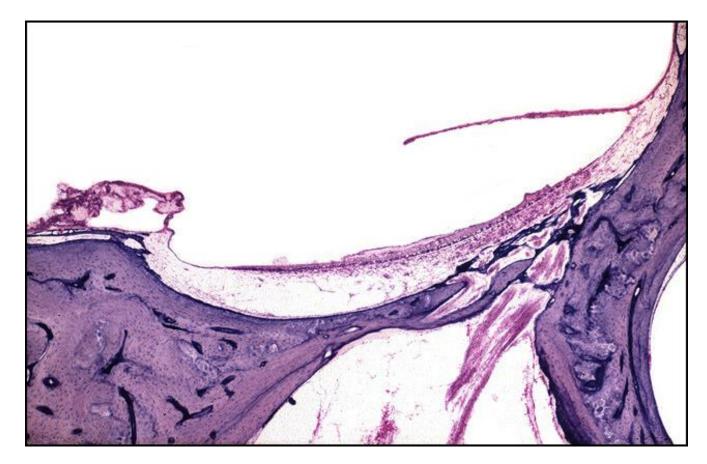
Chapter Section: Disequilibrium of Aging

TB Case Number: 88

Gender: Female

Age (yrs.): 93

- 1. Disequilibrium of aging, positional vertigo
- 2. Vestibulopathy, degenerative, saccule, aging, left
- 3. Cupulolithiasis, mild, posterior canal, bilateral
- 4. Saccule, rupture, vestibulopathy, left
- 5. Artifact, preparation, compression, moderate, bilateral



Title: Degenerative Vestibulopathy, L-211

Chapter: Aging

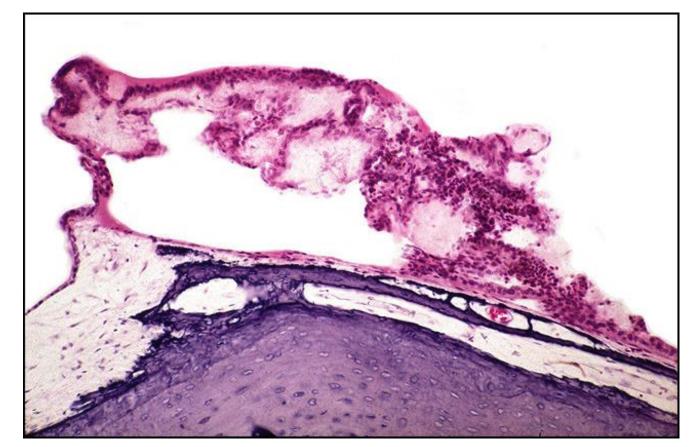
Chapter Section: Disequilibrium of Aging

TB Case Number: 88

Gender: Female

Age (yrs.): 93

- 1. Disequilibrium of aging, positional vertigo
- 2. Vestibulopathy, degenerative, saccule, aging, left
- 3. Cupulolithiasis, mild, posterior canal, bilateral
- 4. Saccule, rupture, vestibulopathy, left
- 5. Artifact, preparation, compression, moderate, bilateral



Title: Degenerative Vestibulopathy, L-211

Chapter: Aging

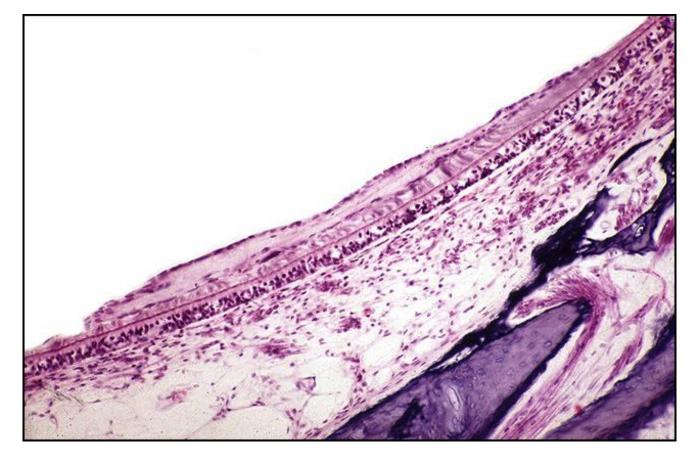
Chapter Section: Disequilibrium of Aging

TB Case Number: 88

Gender: Female

Age (yrs.): 93

- 1. Disequilibrium of aging, positional vertigo
- 2. Vestibulopathy, degenerative, saccule, aging, left
- 3. Cupulolithiasis, mild, posterior canal, bilateral
- 4. Saccule, rupture, vestibulopathy, left
- 5. Artifact, preparation, compression, moderate, bilateral



Title: Degenerative Vestibulopathy, L-202

Chapter: Aging

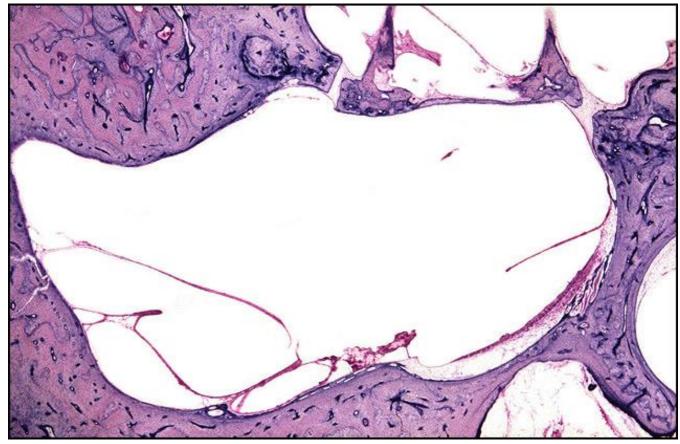
Chapter Section: Disequilibrium of Aging

TB Case Number: 88

Gender: Female

Age (yrs.): 83

- 1. Disequilibrium of aging, positional vertigo
- 2. Vestibulopathy, degenerative, saccule, aging, left
- 3. Cupulolithiasis, mild, posterior canal, bilateral
- 4. Saccule, rupture, vestibulopathy, left
- 5. Artifact, preparation, compression, moderate, bilateral



Title: Degenerative Vestibulopathy, L-202

Chapter: Aging

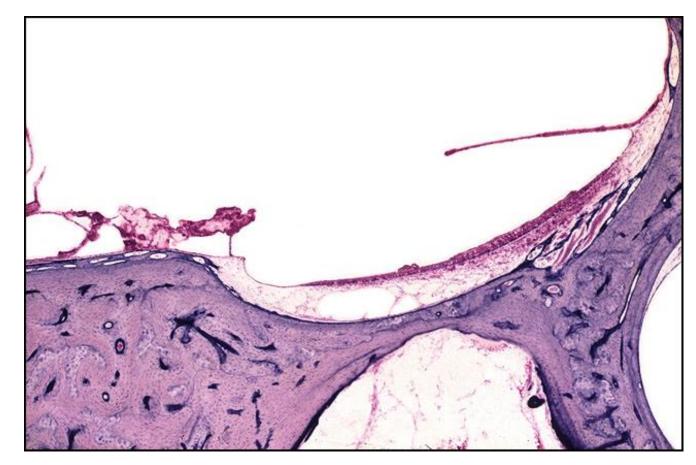
Chapter Section: Disequilibrium of Aging

TB Case Number: 88

Gender: Female

Age (yrs.): 93

- 1. Disequilibrium of aging, positional vertigo
- 2. Vestibulopathy, degenerative, saccule, aging, left
- 3. Cupulolithiasis, mild, posterior canal, bilateral
- 4. Saccule, rupture, vestibulopathy, left
- 5. Artifact, preparation, compression, moderate, bilateral



Title: Degenerative Vestibulopathy, L-141

Chapter: Aging

Chapter Section: Disequilibrium of Aging

TB Case Number: 88

Gender: Female

Age (yrs.): 93

- 1. Disequilibrium of aging, positional vertigo
- 2. Vestibulopathy, degenerative, saccule, aging, left
- 3. Cupulolithiasis, mild, posterior canal, bilateral
- 4. Saccule, rupture, vestibulopathy, left
- 5. Artifact, preparation, compression, moderate, bilateral



Title: Degenerative Vestibulopathy, L-141

Chapter: Aging

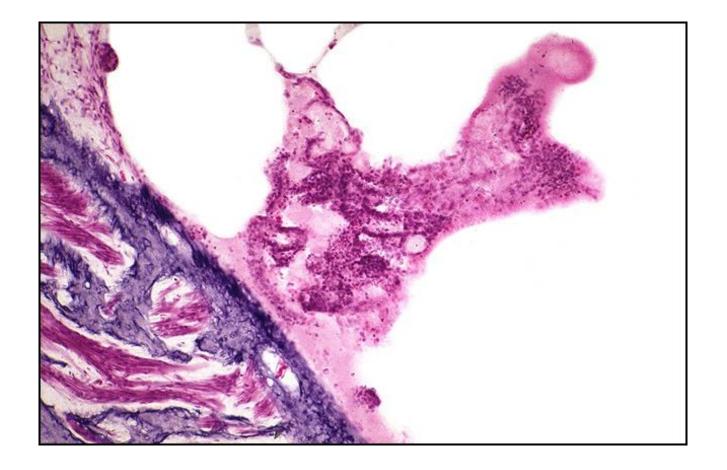
Chapter Section: Disequilibrium of Aging

TB Case Number: 88

Gender: Female

Age (yrs.): 93

- 1. Disequilibrium of aging, positional vertigo
- 2. Vestibulopathy, degenerative, saccule, aging, left
- 3. Cupulolithiasis, mild, posterior canal, bilateral
- 4. Saccule, rupture, vestibulopathy, left
- 5. Artifact, preparation, compression, moderate, bilateral



Ruptured Saccule, L-171

Title: Ruptured Saccule, L-171

Chapter: Aging

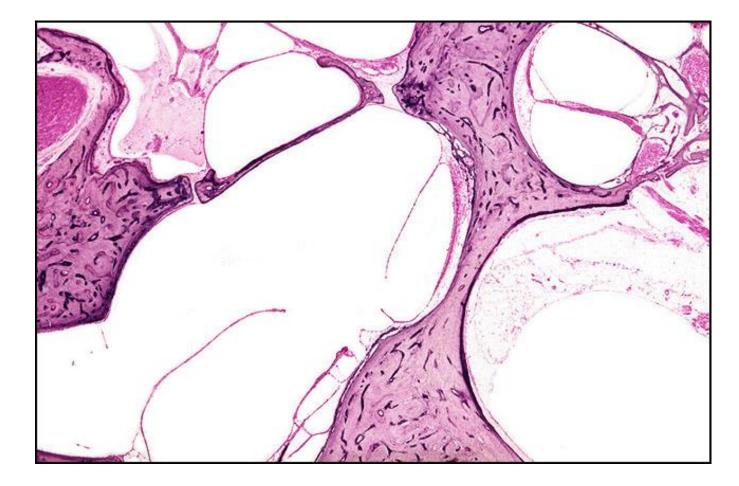
Chapter Section: Disequilibrium of Aging

TB Case Number: 324

Gender: Female

Age (yrs.): 73

- 1. Atrophy of the spiral ligament, bilateral, with ruptures in the middle and apical turns of the right ear
- 2. Ruptures of the utricle and saccule
- 3. Cupulolithiasis, mild, left ear



Title: Degenerative Vestibulopathy, L-211

Chapter: Aging

Chapter Section: Disequilibrium of Aging

TB Case Number: 88

Gender: Female

Age (yrs.): 93

- 1. Disequilibrium of aging, positional vertigo
- 2. Vestibulopathy, degenerative, saccule, aging, left
- 3. Cupulolithiasis, mild, posterior canal, bilateral
- 4. Saccule, rupture, vestibulopathy, left
- 5. Artifact, preparation, compression, moderate, bilateral

