References


70. Green A (1993) Biochemical screening in newborn siblings of cases of SIDS. Arch Dis Child 68:793–796
References

117. Kelmanson IA (1994) Relationship between the incidence of sudden infant death syndrome (SIDS) and other causes of infant mortality in the industrialized countries. Paediatr Perinatol Epidemiol 8:166–172
143. Lavezzi AM, Ottaviani G, Terni L, Matturri L (2006) Histological and biological development...


References

234. Rossi L, Matturri L (1985) Histopathology of aortocoronary glomera: modern anatomo-clini-
References

References


References

Subject Index

A
accessory cardiac conduction pathways 1, 30, 53, 75, 102, 108, 117
  direct accessory pathways 30
  indirect 30
  James fibers 30, 32, 53, 75, 102, 103
  Kent fibers 30, 31, 53, 75, 102, 103
  Mahaim fibers 30–32, 53, 75, 76, 87, 96, 97, 102, 124
  mixed 31
acyl-CoA-dehydrogenase 10
ALTE 1, 10, 11, 123
American Academy of Pediatrics (AAP) 5, 11
  back to sleep campaign 5
apnea 11
  apnea event 5
  apnea monitor 4
arcuate nucleus (ARCn) 8, 12, 32, 58, 73, 112, 116, 124
  agenesis 90, 92, 112, 124
  bilateral hypoplasia 73, 91, 96, 111, 112, 124
  decreased neuronal density 73, 112
  delayed neuronal maturation 73, 112
  formula feeding 73
  hypoplasia 12, 91, 96, 112
  hypoplasia of the arcuate nucleus 97
  monolateral hypoplasia 73, 91, 96, 112, 124
  partial hypoplasia 73, 91
  pons 32
arrhythmias 26, 99, 102, 108, 111
atrioventricular junction (AVJ) 20, 31
atrioventricular node (AVN) 18, 76
  apoptosis 108
  AVN artery 19
  AVN artery thickening 78, 81
  development 27
  dispersion or septation 73
  dualism 78, 106
  histology 18
  innervation 20
  lymphatic drainage 20
  P cells 18
  postnatal molding 28
  resorptive degeneration 100
  star cells 18
  vascular supply 19
autonomic nervous reflexes 8
autonomic nervous system 2, 32, 47
  middle cervical ganglion 62
  stellate ganglion 47, 62, 97, 98, 125
  superior cervical ganglion 47, 62
  sympathetic ganglia 36, 47
autopsy 4, 39, 43, 47, 121

B
bifurcating His bundle/bifurcation 13, 23
  anomalous 78
  left sided 77
  septation 78, 105
borderline SIDS. see gray zone SIDS
brainstem 2, 32, 47, 112, 114, 121, 124
  abnormalities 8
  ambiguous nucleus 33, 60
arcuate nucleus (ARCn) 32, 58, 60, 61, 90, 112, 116

- dorsal motor vagal nucleus 33, 60, 114
- examination 12
- hypoglossal nucleus 34, 60
- hypoxia 96, 114
- locus coeruleus 34, 60
- medulla oblongata 34, 112
- mesencephalon 94, 124
- morphometric analysis 61
- parabrachial/Kölliker-Fuse complex 33, 60, 61, 93
- pons 34, 94, 113, 124
- reticular formation 60
- sampling 57
- solitary tract nucleus 33, 60
- trigeminal tract nucleus 60

bundle branches. see right bundle branches and left bundle branches

bundle of His 21, 22, 77
- development 28
- dispersion or septation 101
- dualism 78, 106
- histology 22
- hypoplasia 78, 106
- innervation 23
- left-sided bundle of His 78, 79
- postnatal molding 28
- resorptive degeneration 100
- vascular supply 22

C

- cardiac conduction system 2, 13, 47, 73, 74, 111, 117, 121, 124
- accessory pathways 1, 30, 53, 75, 102, 108, 117
- anomalous bifurcation 79
- apoptosis expression 80, 107
- apoptotic expression 82
- arteries 78, 96, 106
- atrioventricular node (AVN) 18, 19, 20, 73, 74, 76, 80, 81, 97
- AV junction (AVJ) 20
- AVN/HB dualism 78, 106
- AVN artery 19
- AVN node 13
- AV pathway 13
- bifurcation 13, 23
- bundle branches 13
- bundle of His (HB) 13, 20, 21, 22, 73, 81
- cardiac conduction 99
- cartilaginous hypermetaplasia/metahyperplasia 75, 77, 96, 104
- central fibrous body 20, 22, 73, 74, 79, 80, 81, 82, 97
- development 25
- developmental defects 8
- dispersion/septation 73, 101
- fetal dispersion 75, 76, 102
- fibromuscular hyperplasia of 78, 106
- hemorrhage 75, 104
- histological examination of serial sections 48
- hypoplasia 78, 105
- interatrial pathways 17
- internodal pathways 13, 17, 27
- intramural left bundle branch 78, 105
- intramural right bundle branch 75, 77, 105
- islands of conduction tissue 75
- James fibers 30–32, 53, 75, 102, 103
- Kent fibers 30, 31, 53, 75, 102, 103
- left-sided bundle of His 78, 79, 105
- left bundle branch (LBB) 13, 25
- left sided bifurcation 77
- Mahaim fibers 31, 53, 75, 76, 87, 96, 97, 102, 103, 124
- PCNA expression 81, 108
- postnatal molding 28, 99
- Purkinje cells 13, 16, 18
- Purkinje cell tumor 85, 87, 111
- removal of the cardiac conduction system 48
- resorptive degeneration 73, 74, 76, 80, 96, 99, 100, 124
- right bundle branch (RBB) 13, 23
Subject Index

SAN artery 16
- septation of the bifurcation 78, 105
- serial sectioning 56
- sinoatrial node (SAN) 13, 14, 15, 16, 17, 26, 49
- star cells 18
- tendon of Todaro 19
- zahn node 78, 106
cardiorespiratory arrest 10
cardiorespiratory monitoring 12
carotid bifurcation 37, 47, 61, 62
carotid body or glomus 9, 36, 37, 47
- hyperplasia 9
- hypoplasia 9
carotid sinus 9, 17, 36, 47
central fibrous body 20, 76, 79, 97
- cartilaginous hypermetaplasia 77
- cartilaginous metahyperplasia 75, 104
- islands of conduction tissue 75, 102
central nervous system 32, 47, 112
cigarette smoking 4, 5, 73, 80, 110
- preatherosclerotic lesions 80
clinical and pathological form 40
clinical history 39
coronary arteries 48, 109, 124
- findings 84, 109
- preatherosclerotic lesions 85, 109, 110
crib death 1, 4, 119, 123

D
death scene 39, 43, 70
disease 11

E
ECG 81, 86, 102, 109
enzymatic defects 10
explained death 66, 88
- cardiac tumor 88
- congenital heart disease 111
- fibroma 111
- hypertrophic cardiomyopathy 90, 111
- myocardial infarction 111
- myocarditis 111

F
fasting 10
fetus 44, 62, 84, 93, 108, 112
- coronary arteries 84, 110
- fetal development 26, 46, 100, 117
- fetal respiration 113
- hypoplasia of the arcuate nuclues 112
- preatherosclerotic lesion 110
- pulmonary hypoplasia 113

G
ganglia 17, 37, 61, 62
gastroesophageal reflux 8
genetic analysis 59
 gluconeogenesis defects 10
glycogenosis 10
gray zone SIDS 66, 96, 111, 115

H
heart 9, 13, 14, 49
- autonomic innervation 9
- cardiac conduction system 2, 13, 47, 73, 74, 111, 117, 121, 124
- cardiac innervation 13
- cardiac massage 82
- cardiac sampling 48
- contraction band degeneration 91
- embryonic heart 27
- extrinsic cardiac innervation 34
- fibroma 88, 111
- histological sections 57
- hypertrophic cardiomyopathy 111
- intrinsic cardiac innervation 35
- myocardial infarction 87, 90, 111
home monitoring 6
home monitors 12
homicide 7
hypoglycemia 10

I
immunohistochemistry 63
infanticide 7
infection 10
internodal pathways 17, 27
  – development 27

J
James fibers 30–32, 53, 75, 102, 104

K
Kent fibers 30, 31, 53, 75, 102, 103

L
law no. 31 45, 46, 47
left bundle branch (LBB) 25
  – development 28
  – histology 25
  – innervation 25
  – intramural 78, 105
  – vascular supply 25
Lino Rossi Research Center 3
Lombardy Region 44
long QT syndrome 9, 11, 82, 109, 112, 116, 117
Lown-Ganong-Levine (LGL) syndrome 32
lung 63
  – pulmonary development 113
  – pulmonary hypoplasia 93

M
M-CAD 10
Mahaim fibers 30–32, 53, 75, 76, 87, 96, 97, 102, 103, 124
metabolic defect 10
metabolic impairment 10
myocardial infarction 87

N
near miss 4, 10
necropsy procedure 44
neurogenic factors 1
neuropathology 112

O
oculocardiac reflex 9
Ondine syndrome 9

P
parabrachial/Kölliker-Fuse complex (PB/KF) 33, 113, 124
  – findings 93, 113
  – Kölliker-Fuse nucleus 33, 95, 113, 124
  – lateral parabrachial nucleus 33, 94, 113, 124
  – medial parabrachial nucleus 33, 94, 113, 124
  – morphological analysis 94
  – morphometric analysis 95
paraganglia 37, 61, 115, 124
  – hyperplasia 97, 115, 124
  – immaturity 8
parents of a SIDS infant 5
  – emotional consequences 5
  – judicial investigation 5
pericardial fluid 5
peripheral nervous system 32, 47
  – findings 97
placenta 43, 44, 100
postmortem examination 2
  – brainstem sampling 57
  – cardiac sampling 48
prenatal care 6

R
reflexogenic SIDS 9
  – auditory reflex 9
  – cardio-auditory reflexes 9
  – dive reflex 9
  – fear paralysis reflex 9
  – feigned death reflex 9
  – Ondine’s curse reflex 9
  – vagal cardiorespiratory reflexes 9
resuscitation maneuvers 10, 12
  – cardiac massage 82
Reye syndrome 11
right bundle branch (RBB) 23
  – development 28
  – histology 24
  – innervation 25
  – intramural right bundle 75, 77, 105
  – vascular supply 24
risk factors for SIDS 6, 69
- abuse of alcohol 11
- abuse of drugs 11, 69
- age 69, 70
- ALTE 6, 12
- apnea 6
- bed sharing 6
- cigarette smoke 73, 106, 109
- cigarette smoking 6, 11, 69
- family association with SIDS 69
- formula feeding 6, 71, 72, 80, 107, 110
- infections 6
- low birth weight 69
- low economic level 5
- low weight at birth 5
- near-miss 6
- no prenatal care 6
- pacifiers 6
- pillows 6
- premature infants 5, 6
- prematurity 69
- prone position 6, 69, 70, 72
- season 70
- sex 69
- short interpregnancy interval 5, 6, 12
- smoke 11
- thermal stress 5, 6, 12
- time 70
- twins 5
- vaccination 40
Rossi’s sampling technique 49, 53

S
SIDS risk factors
- atmospheric pressure changes 8
- bed sharing 7
- cigarette smoke 7
- infection 7
- low birth weight 7
- maternal factors 8
- overheating 7
- preterm birth weight 7
- race 8
- season 7
- vaccination 8
SIDS theories 8, 112
- cardiac hypothesis 99
- cardiac theory 8, 99, 112
- multifactorial theory 4
- rebreathing theory 7
- respiratory theory 8, 112
- sleep apnea 4, 12
- status thymicolymphaticus 4
- suffocation 4
- triple risk model 5, 111, 115
- visceral dysskinetic theory 8, 112
sinoatrial node (SAN) 13, 14, 124
- apoptosis 108
- collagen framework 16, 26
- development 26
- histology 15
- hypoplasia 78, 105
- innervation 17, 26
- pacemaker (P) cells 15, 26, 108
- postnatal morphogenesis 108
- SAN artery 14, 16, 26
- slender cells 26
- thickening of the SAN artery 78
- vascular supply 16
sleep 1, 5
- prone position 6, 7, 9, 11
- sleeping position 4, 11, 39
- supine position 6, 11, 70
spinal cord 32, 34, 47
sudden infant death syndrome (SIDS) 1, 2, 123
- autopsy 2
- cases analyzed 65
- cause 10
- clinical history 2, 65
- death scene 2, 70
- definition 2, 5
- diagnosis 3
- epidemiology 5, 69
- etiology 1
- etiopathogenesis 8
- follow-up 5
- history 2
- incidence 5
- near miss 11
- prevention 11
- relationship between SIDS and SIUD 2
- risk factors 5, 7
- sudden intrauterine unexplained death (SIUD) 2, 12, 119, 123
- autopsy protocols 2
- epidemiology 69
- etiology 2
- prevalence 2, 12
- SIUD cases 66

T
- tachycardia 8, 33, 81, 87, 99, 102, 103, 106, 108, 111, 117
- tendon of Todaro 20, 21

V
- vaccination 8, 40

W
- Wolff-Parkinson-White (WPW) syndrome 31, 75, 117