

Special Article

A Personal Cross-reference Filing System for Anesthetic Literature

W. Clayton Petty, M.D., Lt. Col., MC, and W. Douglas Carden, M.D., Major, MC †

A personal cross-reference filing system for anesthetic literature is presented. The system is divided into two major parts: 1) category section, and 2) cross-reference index. Expansion or contraction and personalization are two factors which allow its use by both resident and established anesthesiologist. It is practical, inexpensive, easy to use, and can be set up using 112 to 398 file folders. A basic file-index system format is included to serve as a guide in the establishment of a personal filing system. (Key words: Filing system; Anesthetic literature; Cross-reference.)

MEDICAL LITERATURE is often used ineffectively due to inadequate filing and retrieval methods. The anesthesiologist needs to file anesthesia-related articles and information of personal interest which can be retrieved within minutes for rapid review.

Filing systems for anesthesia literature have been devised.¹⁻³ Medlars, Index Medicus, and other systems are effective in locating material, but require a trip to the library or a long waiting period for requested material. In the retrieval method of Yeakel,¹ articles are abstracted onto special cards, which are coded and keypunched for interpretation by a data-processing center. The need for a computer makes this system unsuitable for the average individual. McClelland and Mapleson^{2,3} devised a feature-card indexing method for anesthesia literature. Each article is given a serial number, allocated a set of features (key words), indexed by punching holes on separate cards corresponding to the designated serial number, and placing the punched cards in a storage bin. Recall consists of using the appropriate

feature-card to locate articles by serial numbers. The feature-card system is complicated, requires a considerable amount of time to keep current, but can be effective once established.

A practical filing system must be 1) inexpensive to set up, 2) simple to use, 3) expandable, 4) capable of being personalized, and 5) cross-indexed to reference hard-to-find subjects sometimes lost in strictly categoric filing systems. These qualifications have served as the basis for the development of the present filing system.

Principles and Establishment of the Filing System

The system was devised over a two-year period by trial and error. Initially, a category method alone was used, but later a cross-reference index was added to help locate frequently used subjects. The bulk of the cross-reference index was compiled from key words used in each filed article. The index of a standard anesthesia text was screened, as well as the 10-year and 20-year indexes of ANESTHESIOLOGY.

The filing system is divided into two major parts: 1) category section and 2) cross-reference index.

The category section has been divided into three major subdivisions: 1) technique and clinically related material, 2) organ systems, and 3) related topics. The first section is designed to be used for articles on techniques employed in anesthetic practice and pharmacology of anesthetic-related drugs. Organ systems are to be used for information on anatomy, physiology, and disease entities rather than specific anesthetic technique. The last section is to serve as an area to place any special subjects which fail to adapt to other categories.

* Research Director and Assistant Chief.

† Resident.

Received from the Anesthesia and Operative Service, Brooke General Hospital, Brooke Army Medical Center, Fort Sam Houston, Texas 78234. Accepted for publication November 27, 1972.

The major topics of interest to anesthesiologists are arranged in a logical sequence, using numbers. Any segment of the anesthetic literature, *e.g.*, articles, notes from meetings, thoughts on slips of paper, reprints, can be filed by merely writing a number on the cover sheet and placing the information in the proper file folder. Further subdivision is accomplished using lower-case alphabet letters. An example of categorization is:

700-749 RELATED TOPICS

706. Medical equipment

a. Anesthesia machines

1. Carbon dioxide absorption

Section 706 can be used for all articles of general interest in the field of medical equipment. Subdivision 706-a could be used for articles on anesthetic machines in general. File folder 706-a-1 is strictly limited to articles relating to carbon dioxide absorption.

A cross-reference index assists in rapid retrieval of information and, in some cases, facilitates rapid filing. Many subjects could properly be placed under more than one category. An article entitled "The use of curare in the treatment of asthma" could be properly referenced to two areas: "204-a-1 Curare" and "354-c Asthma." The article can be placed in either category and a slip of paper with the reference placed in the other. Thus, retrieval of information can be readily accomplished for subjects difficult to file, *e.g.*, hiccups, drug abuse, kyphoscoliosis.

A complete filing system, as outlined, would require 398 folders (cost, approximately \$18.00). The elimination of letter categories would decrease the number of file folders to a total of 112, which could be expanded as adequate numbers of articles on specific subjects are accumulated. An example would be to file all articles pertaining to anesthetic machines in category 706. When an adequate number of articles on carbon dioxide absorption have been accumulated, expansion to "706-a-1 Carbon dioxide absorption" is accomplished. On the other hand, the system can remain simple, with major categories only. The basic system is simple enough to allow the initial set-up to be completed in a few hours, and should be functional within a few days. Once filing of

the original backlog of accumulated anesthetic literature has been completed, new material can easily be filed in a few minutes of each week.

Expansion

Personal preference and interests in anesthesia can be easily integrated into the basic filing system. Individual interest in the area of pediatric anesthesia could expand "153 Pediatrics" to the following:

153. Pediatrics

a. Anatomy and physiology

1. Fetus
2. Newborn
3. Child

b. Fluids and blood

1. Blood volume
2. Calculations
3. Electrolytes

c. Monitoring

1. Temperature
2. Blood pressure
3. EKG
4. Muscle relaxants

d. Techniques

1. Circle system
2. Awake intubation
3. Modified T-piece
4. Pneumoencephalograms
5. Internal jugular puncture
6. Intra-arterial catheters
7. Umbilical catheterization

The filing system is flexible enough to be used by both the resident and the established anesthesiologist.

Any personal expansion of the category section can easily be cross-referenced by placing the key word of the added file folder in alphabetical order in the cross-reference index. Key words which may be familiar to the individual can be used and will allow easier filing and retrieval.

This entire filing concept has been designed and developed with one goal in mind: To provide a guide for establishing a personal, practical filing system for anesthesia literature.

References

1. Yeakel AE: An anesthesia literature abstracting and retrieval method (ALARM). *ANESTHESIOLOGY* 25:760-766, 1964
2. McClelland RMA, Mapleson WW: The use of feature cards and their application in the indexing of anaesthetic literature. *Proc R Soc Med* 58:203-208, 1965
3. McClelland RMA, Mapleson WW: Feature cards. *Anaesthesia* 21:3-18, 1966

CATEGORIES

- | | |
|--|---|
| <p>1-49 INHALATION ANESTHESIA</p> <ol style="list-style-type: none"> 2. Uptake and Distribution 3. Mechanism of action <ol style="list-style-type: none"> a. Inhalation agents b. Local anesthetics 4. Agents <ol style="list-style-type: none"> a. Halothane b. Methoxyflurane c. Ether d. Fluroxene e. Cyclopropane f. Nitrous oxide g. Forane <p>50-99 INTRAVENOUS ANESTHESIA</p> <ol style="list-style-type: none"> 51. Barbiturates 52. Narcotics <ol style="list-style-type: none"> a. Morphine b. Demerol c. Fentanyl d. Antagonists e. Addiction 53. Neuroleptanalgesia <ol style="list-style-type: none"> a. Innovar b. Valium c. Ketamine <p>100-149 REGIONAL ANESTHESIA</p> <ol style="list-style-type: none"> 101. Local anesthetics <ol style="list-style-type: none"> a. Toxicity and allergy b. Lidocaine c. Tetracaine d. Bupivacaine e. Carbocaine f. Cocaine 102. Spinal <ol style="list-style-type: none"> a. Anatomy b. Physiology c. Complications 103. Epidural 104. Brachial plexus 105. Intravenous regional 106. Pain management <ol style="list-style-type: none"> a. Tic doloreaux b. Low back pain c. Causalgia d. Agents | <p>150-199 SPECIAL TECHNIQUES</p> <ol style="list-style-type: none"> 151. Pre-post operative <ol style="list-style-type: none"> a. Anesthesia risk b. Preoperative visit 152. Unusual techniques <ol style="list-style-type: none"> a. Hypnosis b. Electronarcosis c. Outpatient anesthesia d. Mass casualties e. Acupuncture f. Liverpool technique g. Dental anesthesia 153. Pediatrics <ol style="list-style-type: none"> a. Anatomy-physiology b. Fluid and blood c. Monitoring d. Techniques 154. Obstetrics <ol style="list-style-type: none"> a. Cesarean section b. Vaginal delivery c. Fetal effects 155. Geriatrics 156. Neurosurgical <ol style="list-style-type: none"> a. Induced hypothermia b. Induced cardiac arrest c. Posterior fossae d. Techniques 157. Ophthalmology 158. ENT <ol style="list-style-type: none"> a. Bronchoscopy, laryngoscopy b. Tonsillectomy c. Radical neck surgery <ol style="list-style-type: none"> 1. Induced hypotension 159. Thoracic-cardiovascular surgery <ol style="list-style-type: none"> a. Open-heart b. Thoracotomy c. Carotid artery d. Tracheoesophageal fistula 160. General surgery <ol style="list-style-type: none"> a. Bowel obstruction b. Pyloromyotomy 161. Urology <ol style="list-style-type: none"> a. Transurethral resection b. Kidney transplants 162. Orthopedics <ol style="list-style-type: none"> a. Total hip replacement b. Tourniquets 163. Plastic surgery 164. Radiologic procedures <ol style="list-style-type: none"> a. Pneumoencephalograms <p>200-249 PHARMACOLOGY</p> <ol style="list-style-type: none"> 201. Cardiovascular system <ol style="list-style-type: none"> a. Digitalis b. Antiarrhythmics c. Vasopressors d. Antihypertensives |
|--|---|

- 202. Respiratory
 - a. Stimulants
 - 203. Central nervous system
 - a. Hypnotics
 - b. Tranquilizers
 - c. CNS stimulants
 - d. Antiparkinsonism drugs
 - e. Ethanol
 - 204. Neuromuscular junction
 - a. Nondepolarizing
 - 1. Curare
 - 2. Gallamine
 - 3. Antagonists
 - b. Depolarizing
 - 1. Succinylcholine
 - 2. Atypical cholinesterase
 - 205. Autonomic nervous system
 - a. Belladonna derivatives
 - b. Alpha stimulators and blockers
 - c. Beta stimulators and blockers
 - d. Ganglionic blockers
 - e. Atropine
 - f. Scopolamine
 - 206. Endocrine, metabolic
 - a. Corticosteroids
 - b. Immunosuppressive
 - c. Insulin
 - d. Ions
 - 1. Calcium
 - 2. Sodium
 - 3. Potassium
 - 4. Magnesium
 - 207. Renal
 - a. Diuretics
 - 208. Gastrointestinal
 - a. Antiemetics
 - b. Antacids
 - c. Histamine
 - 209. Obstetrics, gynecology
 - a. Oxytocins
 - b. Estrogens
 - 210. Kinetics
 - a. Drug metabolism and excretion
 - b. Microsomal enzymes
 - c. Enzyme induction
 - d. Interaction
 - 211. Abuse
 - a. Overdose
 - b. Poisoning
 - 212. Allergy
 - 213. Antibiotics
- 250-299 INHALATION THERAPY
- 251. Respirators
 - a. Volume-limited
 - b. Pressure-limited
 - c. Indications
 - d. Management
 - e. Complications
 - 252. Humidification
 - a. Ultrasonic nebulization
 - b. Mucolytics
 - c. Bronchodilators
 - 253. Oxygen therapy
 - a. Administration
 - b. Indications
 - c. Storage of oxygen
 - d. Toxicity
 - e. Hyperbaric
 - f. Hypoxia
 - g. Analyzers
 - h. Apneic oxygenation
 - 254. Physiotherapy
 - 255. Intensive care
 - a. Laryngoscopy
 - b. Oral endotracheal intubation
 - 1. Techniques
 - 2. Awake
 - 3. Complications
 - c. Nasoendotracheal intubation
 - 1. Technique
 - 2. Complications
 - d. Tracheostomy
 - 1. Indications
 - 2. Care
 - 3. Complications
 - e. Organization of ICU
 - f. Special considerations
 - 1. Shock
 - 2. Flail chest
 - 3. Coma
 - 4. Aspiration pneumonia
 - 5. Burns
 - 6. Obesity
 - 7. Fat emboli
 - 8. Pulmonary insufficiency
- 300-349 CARDIOVASCULAR
- 301. Anatomy
 - 302. Physiology
 - a. Cardiac output
 - b. Arterial pressure and monitoring
 - c. Central venous pressure
 - d. Electrocardiogram
 - 303. Heart disease
 - a. Arrhythmias
 - b. Coronary artery disease
 - c. Valvular disease
 - d. Congenital heart disease
 - e. Congestive heart failure
 - 304. Peripheral vascular disease
 - a. Generalized arteriosclerosis
 - b. Hypertension
 - c. Aortic disease

- d. Carotid artery disease
- e. Aneurysms
- 305. Venous disease
 - a. Intravenous catheter complications and techniques
 - b. Thrombosis
- 306. Resuscitation
 - a. Methods
 - b. Teaching
 - c. Complications
- 307. Extracorporeal circulation
 - a. Pump oxygenator
 - b. Complications
- 308. Diagnostic techniques
- 350-399 RESPIRATORY
- 351. Anatomy
- 352. Physiology
 - a. Control of respiration
 - b. Diffusion
 - c. Pulmonary function
 - d. Pulmonary circulation
 - e. Biochemical
- 353. Carbon dioxide
 - a. Hypercarbia
 - b. Hypocarbia
 - c. Analyzers
 - d. Response curve
- 354. Diseases and complications
 - a. COPD
 - b. Pulmonary emboli
 - c. Asthma
 - d. Drowning
 - e. Kyphoscoliosis
 - f. Tuberculosis
 - g. Atelectasis
 - h. Pulmonary edema
 - i. Pneumothorax
 - j. Bronchospasm
 - k. Airway obstruction
 - l. Apnea
- 355. Hiccups
- 400-449 BLOOD
- 401. Arterial and venous blood gases
 - a. Oxygen and carbon dioxide
 - b. Acid-base
 - c. Analyzers
 - d. Sampling
 - e. Complications
- 402. Hemoglobin
 - a. Oxyhemoglobin-dissociation curve
 - b. Hemoglobinopathies
- 403. Hematology
 - a. Anemia
 - b. Clotting disorders
 - c. Polycythemia
 - d. Porphyria
 - e. Anticoagulants
- 404. Transfusion
 - a. Reactions
 - b. Autotransfusion
 - c. Blood banking
 - d. Massive transfusions
 - e. Jehovah witnesses
 - f. Plasma and substitutes
 - g. Blood volume
 - h. Air embolism
- 450-499 NERVOUS SYSTEM
- 451. Anatomy
 - a. Central nervous system
 - b. Autonomic nervous system
 - c. Cerebrospinal fluid
- 452. Physiology
 - a. Cerebral blood flow
 - b. Pain mechanisms
- 453. EEG
- 454. Awareness during anesthesia
- 455. Eye
- 456. Hearing
- 457. Diseases
 - a. Hydrocephalus
 - b. Tumors
 - c. Cerebral edema
 - d. Coma
 - e. Paraplegia
 - f. Aneurysms
- 458. Neuromuscular junction
 - a. Anatomy and physiology
 - b. Diseases
 - 1. Myasthenia gravis
 - 2. Myotonias
- 459. Nerve injuries
- 500-549 ENDOCRINE AND METABOLIC
- 501. Adrenal
 - a. Pheochromocytoma
 - b. Addison's disease
- 502. Thyroid
 - a. Hyperthyroidism
 - b. Hypothyroidism
- 503. Pituitary
- 504. Pancreas
 - a. Diabetes
- 505. Parathyroid
- 506. Fluids and electrolytes
- 507. Cellular diseases
 - a. Enzymes
 - b. Mitochondria
 - c. RNA, DNA
 - d. Teratogenicity
 - e. Intermediary metabolism
 - f. Membranes
- 508. Temperature regulation
 - a. Fever
 - b. Malignant hyperpyrexia
 - c. Hypothermia
 - d. Shivering

- 550-599 PREGNANCY, LABOR,
PARTURITION
551. Anatomy
552. Physiology
553. Pregnancy
 a. Physiologic changes
 b. Toxemia
 c. Labor and delivery
 d. Fetal depression
- 600-649 GENITOURINARY
601. Anatomy
602. Physiology
603. Diseases
 a. Acute renal failure
 b. Chronic renal failure
 1. Uremia
 2. Dialysis
 c. Trauma
 d. Retention
- 650-699 GASTROINTESTINAL
651. Anatomy and physiology
652. Stomach
 a. Vomiting
 b. Gastroesophageal reflux
653. Bowel obstruction
654. Liver
 a. Hepatitis
 b. Alcoholism
 c. Function tests
655. Diseases
 a. Diarrhea
 b. Malabsorption
 c. Carcinoid
 d. Regional enteritis
- 700-749 RELATED TOPICS
701. History of anesthesia
702. Societies and license
 a. County
 b. State
 c. National
 d. Curriculum vitae
703. Medicolegal
 a. Malpractice insurance
 b. Case reports
704. Medical economics
 a. Health care insurance
 b. Office practice
705. Designs
 a. Operating rooms
 1. Electrical hazards
 2. Fire and explosions
 3. Positioning
 b. Intensive care unit
706. Medical equipment
 a. Anesthesia machines
 1. Carbon dioxide absorption
 2. Disposables
 3. Sterilization
 4. Vaporizers
 5. Flowmeters, valves
 b. Block-Aid monitor
 c. Blood warmers
 d. Pressure transducers
 e. Anesthesia accessories
 1. Airways
 2. Endotracheal tubes
 3. Laryngoscopes
 4. Esophageal stethoscopes
 5. Wright spirometer
 f. Catheters, stopcocks, etc.
 g. Defibrillators
 h. Temperature monitors
707. Physics
708. Statistics

CROSS-REFERENCE INDEX

- A
Acetylcholine 458-a
Acid-base
 analysis 401-b
 blood 401-b
 CSF 451-c
Acupuncture 152-e
Acute renal failure 603-a
Addiction 52-e
Addison's disease 501-b
ADH 503
Adrenal 501
Air anesthesia 152
Air embolism 404-h
Airway obstruction 354-k
Alcohol
 block 106-d
 effect on CNS 106-c
Allergies
 general 212
 xylocaine 101-a
Alpha blockers 205-b
American College of Anesthesiologists 702-c
American Society of Anesthesiologists 702-c
Anaphylaxis 212
Anatomy
 adrenal 501
 autonomic nervous system 451-b
 central nervous system 451-a
 gastrointestinal 651
 heart 301
 larynx 351
 lungs 351
 neuromuscular junction 458-a
 pancreas 504
 parathyroid 505
 pituitary 503
 pregnancy 551
 spinal cord 102-a

- thyroid 502
trachea 351
urologic 601
Anectine 204-b-1
Anemia 403-a
Anesthesia
 asthma 354-c
 electroanesthesia 152-b
 hyperthyroidism 502-a
 hypnosis 152-a
 inhalation 1-49
 Jehovah witness 404-e
 ketamine 53-c
 local 101
 narcotics 52
 neuroleptanesthesia 53
 neurosurgery 156
 obstetrics 154
 pediatrics 153
 pheochromocytoma 501-a
 regional 100-149
 special techniques 150-199
 theories of 3
 thoracic 159
 transurethral resection 161-a
Aneurysms
 cardiovascular 304-c
 CNS 457-f
Antacids 208-b
Antagonists
 enzymes 507-a
 muscle relaxants 204-a-3
 narcotics 52-d
Antibiotics 213
Anticoagulants 403-c
Antiemetics 208-a
Aortic valve disease 303-c
Apnea 354-1
Arrhythmias 303-a
Arterial
 blood gases 401-a
 pressure 302-b, 706-d
 puncture and injections 401-d
Aspiration pneumonia 255-f-1
Asthma 354-c
Atelectasis 354-g
Atropine 205-e
Autonomic nervous system 205, 451-b
Autotransfusion 404-b
Awake intubation 255-b-2
Awareness during anesthesia 454
Axillary block 104
- B**
Barbiturates 51
Beta blockers 205-c
Biochemistry
 cellular 507-e
 hemoglobin 402
 hypoxia 253-f
 lung 352-e
Block-Aid monitor 706-b
Blood
 anticoagulants 403-c
 calcium 206-d-1
 hepatitis 654-a
 Jehovah witness 404-e
 mass casualties 404-d
 medicolegal 703
 pediatrics 153-b
 potassium 206-d-3
 patch 102-c
 reactions 404-a
 shock 255-f-1
 volume 404-g
 warmers 706-c
Blood gas
 analysis 401
 machines 401-c
Brachial plexus 104
Bronchoscopy 158-a
Bronchospasm 351-j
Bupivacaine 101-d
Burns 255-f-5
- C**
Calcitonin 502
Calcium
 blood transfusion 404
 muscle contraction 458-a
 parathyroid 505
Carbocaine 101-e
Carbon dioxide
 adsorption 706-a-1
 blood analysis 401-a
 cerebral blood flow 452-a
 gas analysis 353-c
 hypercarbia 353-a
 hypocarbia 353-b
 respiration 352-a
 response curve 353-d
Carcinoid 655-c
Cardiac
 arrest 306
 output 302-a
 pacemakers 159
Cardiopulmonary bypass 307, 159-a
Care
 equipment 706-a-3
 intensive 255
 nasoendotracheal 255-c
 tracheostomy 255-d-2
Carotid artery anesthesia 159-c
Casualties 152-d

- Catheter complications 706-f, 302-c, 305-a
Caudal block 103
Causalgia 106-c
Central venous pressure 302-c
Cerebral blood flow 452-a
Cerebral edema 457-e
Cerebrospinal fluid 451-c
Cesarean section 154-a
Cholinesterase
 true 458-a
 pseudo 204-b-2
Chronic obstructive pulmonary disease 354-a
Circulation
 arrhythmias 303-a
 cardiac output 302-a
 cerebral blood flow 452-b
 changes in pregnancy 553-a
 effects of positioning 705-a-3
 EKG 302-d
 fetal 153-a
 ganglionic blockers 205-d
 induced hypotension 158-c-1
 pressor agents 201-c
Citaneal 101
Clotting disorders 403-b
Cocaine 101-f
Coma 457-d
Combining power 401
Complications
 air embolism 404-h
 airway obstruction 354-k
 anemia 403-a
 arrhythmias 303-a
 aspiration pneumonia 255-f-4
 asthma 354-e
 blood transfusions 404-a
 bronchospasm 354-j
 burns 255-f-5
 cardiac arrest 306
 cerebral edema 457-c
 chronic lung disease 354-a
 clotting disorders 403-b
 diabetes 504-a
 drowning 354-d
 electrical 705-a-1
 epinephrine injection 201-c
 explosions 705-a-2
 fire 705-a-2
 fluid overload 506
 hepatitis 654-a
 hiccup 355
 histamine release 208-c
 hypercarbia 353-a
 hypocarbia 353-b
 hypoxia 253-f
 Jehovah witness 404-c
 laryngeal edema 354-k
 local anesthetics 101-a
 malignant hyperpyrexia 508-b
 medicolegal 703
 muscle relaxants 204
 myocardial infarction 303-b
 nasotracheal intubation 255-c-2
 obesity 255-f-6
 oxygen toxicity 253-d
 pheochromocytoma 501-a
 polycythemia 403-c
 porphyria 403-d
 positioning 705-a-3
 pulmonary edema 354-h
 pulmonary emboli 354-b
 pulmonary insufficiency 255-f-8
 regional anesthesia 100
 renal failure 603
 respirators 251-e
 shivering 508-d
 shock 255-f-1
 surfactant loss 352-c
 teratogenicity 507-d
 tourniquet paralysis 162-b
 toxemia 553-b
 tracheostomy 255-d-3
 transurethral resection 161-a
 ultrasonic nebulization 252-a
 uremia 603-b-1
 venous catheter 305-a
 vomiting 652-a
Congenital heart disease 303-d
Contrast media 164
Coronary artery disease 303-b
Corticosteroids 206-a, 501
Curare 204-a-1
Cyclopropane 4-c
Cystic fibrosis 354

D
Deadspace 352-c
Decamethonium 204
Defibrillators 706-g
Demerol 52-b
Dental anesthesia 152-g
Dermatomes 351
Dextran 506
Diabetes 504-a
Dialysis 603-b-2
Diarrhea 655-a
Diffusion 352-b
Digitalis 201-a
Disseminated intravascular coagulation 403-b
Diuretics 207-a
DNA 507-c
Doppler 302-b
Dopram 202-a
Droperidol 53-a

- Drowning 354-d
 Drugs
 abuse 211
 enzyme induction 210-c
 interactions 210-d
 metabolism 210-a
 Dual block 204-b
 Ductus arteriosus 303d
- E**
- Eclampsia 553-b
 Edema
 cerebral 457-c
 laryngeal 354-k
 pulmonary 354-h
 EEG 453
 Effect of anesthesia on
 cardiac output 302-a
 cerebral blood flow 452-a
 circulation 300
 drug metabolism 210-a
 fetus 153
 intracellular 507
 muscle relaxants 358-a
 renal 602
 respiration 352-a
 teratogenicity 507-d
 EKG 302-d
 Electrical hazards 705-a-1
 Electronarcosis 152-b
 Electroshock therapy 152
 Emboli
 air 404-h
 fat 255-f-7
 pulmonary 354-b
 Emphysema 354-a
 Endocrine 500
 Endotracheal
 awake 255-b-2
 equipment 706-e-2
 techniques 255-b-1, 255-c-1
 ENT 501
 Enzymes 507-a
 Epidermolysis bullosa 163
 Epidural anesthesia 103
 Epinephrine 201-c
 Equipment
 Block-Aid monitor 706-b
 blood gas analyzer 401-c
 care 706-a-3
 defibrillators 706-g
 EKG 302-d
 electrical hazards 705-a-1
 humidification 252
 pediatric 153
 respirators 251
 sterilization 706-a-3
 Ethanol 654-b
- Ether 4-c
 Explosions 705-a-2
 Extracorporeal circulation 307
- F**
- Fasciculation 204-b
 Fentanyl 52-c
 Fetus 153
 Filters 404
 Fires 705-a-2
 Flail chest 302-c
 Flaxidyl 204-a-2
 Flowmeters 706-a-4
 Fluid therapy
 burns 255-f-5
 cesarean section 154-a
 diabetes 504-a
 overload 506
 pediatrics 153-b
 shock 255-f-1
 surgery 506
 toxemia 553-b
 volume expanders 506
 Fluothane 4-a
 Forane 4-g
 Formulas
 acid-base calculations 401-b
 blood gas corrections 401-a
 cardiac output 302-a
 cerebral blood flow 452-a
 fluid therapy
 adults 506
 burns 255-f-5
 pediatrics 153-b
 physics 707
 pulmonary function 352-c
 statistics 708
 uptake and distribution 2
 Full stomach 255-b-2
- G**
- Gallamine 204-a-2
 Ganglionic blockers 205-d
 Gas cylinders 253-c, 707
 Gas laws 707
 Gastroesophageal reflux 652-b
 Gastrointestinal 650-699, 208
 Genitourinary 600-649
 Geriatrics 155
 Glaucoma 455
 Gravity, specific 707
 Gynecology 209, 550-599
- H**
- Halothane 4-a
 Headache 102-c
 Health insurance 704-a
 Hearing 456

Heart failure 303-c
Hematology 403
Hemoglobin 402
Hemoglobinopathies 402-b
Hepatitis 654-a
Hexafluorenum 204-b
Hiccup 355
Histamine 208-c
History
 anesthesia 701
 blood gas analysis 401
 carbon dioxide adsorption 706-a-1
 cardiopulmonary bypass 307
 cerebral blood flow 452-a
 curare 204-a-1
 electronarcosis 152-b
 hypnosis 152-a
 inhalation therapy 250
 local anesthetics 101
 neuroleptanesthesia 53
 resuscitation 306
 spinal 102
 succinylcholine 204-b-1
 tracheostomy 255-d
Humidification 252
Hydrocephalus 457-a
Hyperbaric oxygen 353-e
Hypercarbia 353-a
Hypersensitivity reaction
 blood 404-a
 halothane 4-a
 histamine release 208-c
 local anesthetics 101-a
 narcotics 52
Hypertension 304-b
Hyperthermia 508-a
Hyperthyroidism 502-a
Hyperventilation 353-b
Hypnosis 152-a
Hypocarbica 353-b
Hypotension
 induced 158-c-1
 shock 255-f-1
Hypothermia 508-c
Hypothyroidism 502-b
Hypoxia 253-f

I

Immunosuppressives 206-b
Inappropriate ADH secretion 503
Indigo carmine 161-a
Induced hypotension 158-c-1
Induced hypothermia 156-a
Inhalation therapy 250
Innovar 53-a
Insulin 206-c
Intensive care 255
Intravascular coagulation 403-b

Intravenous
 barbiturates 51
 catheters 305-a
 central venous pressure 302-c
 pacemakers 159
 regional anesthesia 105
Intubation
 airway obstruction 354-k
 anatomy 351
 awake 255-a-2
 nasotracheal 255-c
 oral endotracheal 255-a
 pediatrics 153-d
 resuscitation 306
 tracheostomy 255-d
Ions
 calcium 206-d-1
 intracellular 507
 magnesium 206-d-4
 potassium 206-d-3
 sodium 206-d-2

J-K

Jehovah witness 404-c
Ketamine 53-c
Kyphoscoliosis 354-e

L

Laryngoscope 706-e-3
Larynx
 anatomy 351
 edema 354-k
 stricture 354-k
Lidocaine 101-b
Liver 654
Liverpool anesthesia 152-f
Local anesthetics
 toxicity 101-a
 mechanism of action 3-b
Lungs
 anatomy 351
 biochemistry 352-c
 mechanics 352-c
 pediatrics 153-a
 surfactant 352-e
 volumes 352-c

M

Magnesium 206-d-4
Malabsorption 655-b
Malignant hyperpyrexia 508-b
Malpractice insurance 703-a
Measurements
 acid-base CSF 451-c
 arterial blood gases 401-a
 blood volume 404-g
 carbon dioxide 353-c
 cardiac output 302-a

- central venous pressure 302-c
- EEG 453
- EKG 302-d
- hemoglobin 402
- lung compliance 352-c
- lung volume 352-e
- neuromuscular blockade 204, 706-b
- nitrogen 352
- oxygen 253-g
- prothrombin time 403-b
- respirator volumes 352-c, 706-e-5, 251-d
- temperature 706-h
- uptake and distribution 2
- Medicolegal 703
- Membranes 507-f
- Meperidine 52-b
- Mepivacaine 101-e
- Metabolic effects of anesthetics 507-c
- Metabolism of drugs 210-a
- Methoxyflurane 4-b
- Microsomes 210-b, 507
- Mitochondria 507-b
- Mitral valve disease 303-c
- Monitoring
 - acid-base blood 401-b
 - anesthetic agent 4
 - arterial blood gases 401-a
 - blood volume 404-g
 - carbon dioxide 353-c
 - cardiac output 302-a
 - central venous pressure 302-c
 - cerebral blood flow 452-a
 - coagulation 403-b
 - diabetes 504-a
 - EEG 453
 - EKG 302-d
 - muscle relaxants 204, 706-b
 - oxygen administration 253-g
 - pediatrics 153
 - respirators 352-c, 706-e-5, 251-d
 - temperature 706-h
- Morphine 52-a
- Mucolytics 252-c
- Muscle relaxants
 - anesthetic agents 4
 - antibiotics 213
 - Block-Aid monitor 706-b
 - burns 255-f-5
 - complications 204
 - curare 204-a-1
 - decamethonium 204
 - diseases of muscle 458-b
 - dopram test 202-a
 - dual block 204
 - gallamine 204-a-2
 - hexafluorenum 204-b
 - history 204
 - mylaxen 204-b
 - neuromuscular junction 458, 204
 - paraplegics 457-e
 - pediatrics 153
 - prosthigmine 204-a-3
 - pseudocholinesterase 204-b-2
 - succinylcholine 204-b-1
 - Myasthenia gravis 458-b-1
 - Myocardial infarction 303-b
 - Myoglobin 204-b
- N
 - Narcan 52-d
 - Nasoendotracheal intubation 255-c
 - Nasogastric tube 255-c
 - Nebulization 252
 - Needles 706-f
 - Nembutal 51
 - Nerve injuries 459
 - Nervous system
 - anatomy 451
 - autonomic nervous system 451-b
 - cerebral edema 457-c
 - cerebrospinal fluid 451-c
 - neurosurgical anesthesia 156
 - physiology 452
 - Neurosurgical anesthesia 156
- O
 - Obesity 255-f-6
 - Obstetrics
 - aspiration pneumonitis 255-f-4
 - caudal 103
 - changes in pregnancy 553-a
 - cesarean section 154-a
 - epidural 103
 - oxytocin 209
 - paracervical 154
 - penthrane 4-b, 154
 - spinal 102, 154
 - teratogenicity 507-d
 - toxemia 553-b
 - uptake and distribution 2
 - Operating rooms 705-a
 - Ophthalmology 455, 157
 - Outpatient anesthesia 152-c
 - Oxygen
 - administration 253-a
 - blood analysis 401-a
 - fire and explosions 705-a-2
 - hyperbaric 253-e
 - intracellular 708-c
 - preparation and storage 253-c
 - toxicity 253-d
 - Oxytocin 209-a
- P
 - Pacemakers 159
 - Pain 106
 - Paraplegics 457-e
 - Parathyroid 505
 - Pediatrics

- anatomy 153-a
- fetal hemoglobin 402
- fetus 151-c
- fluids 153-b
- ketamine 53-c
- monitoring 153-c
- physiology 153-a
- techniques 153-d
- Penthrane 4-b
- Pentobarbital 51
- Pentothal 51
- Peripheral vascular disease 304
- pH
 - blood 401-b
 - CSF 451-c
- Pharmacology
 - anticoagulants 403-c
 - antiemetics 208-a
 - barbiturates 51
 - calcium 206-d-1
 - enzyme inhibition 210-c
 - ganglionic blockers 205-d
 - local anesthetics 101
 - magnesium 206-d-4
 - muscle relaxants 204
 - narcotics 52
 - potassium 206-d-3
 - pressor agents 201
 - resuscitation 306
 - sodium 206-d-2
- Phenol block 106
- Pheochromocytoma 501-a
- Physics 707
- Physiology
 - autonomic nervous system 451-b
 - bronchospasm 354-j
 - burns 255-f-5
 - cardiac arrest 306
 - circulation 302
 - CNS 352
 - drowning 354-d
 - electronarcosis 152-b
 - fluid overload 506
 - hyperbaric oxygenation 253-e
 - hyperthermia 508-b
 - local anesthetics 101
 - muscle relaxants 458-a
 - neuroleptanesthesia 53
 - pediatrics 153-a
 - respiration 352
 - shock 255-f-1
 - urology 602
 - vomiting 652-a
- Physiotherapy 254
- Pituitary 503
- Plasma 506
- Pneumoencephalogram 164-a
- Pneumothorax 354-i
- Poisons 211-b
- Polycythemia 403-c
- Pontocaine 101-c
- Porphyria 403-d
- Positioning 705-a-3
- Postoperative
 - aspiration pneumonia 255-f-4
 - carbon dioxide retention 353-a
 - hepatitis 654-a
 - hypothermia 508-c
 - hypoxia 253-f
 - intensive care 255
 - laryngeal edema 354-k
 - oxygen administration 253-a
 - pain management 106
 - respirator stimulants 202-a
 - urinary retention 603-d
 - venous catheter complications 305-a
- Potassium 206-d-3
- Pregnancy 154, 553
- Preoperative
 - addicts 52-c
 - anticoagulants 403-c
 - antiemetics 208-a
 - atropine 205-e
 - barbiturates 51
 - cardiovascular evaluation 303
 - cesarean section 154-a
 - demerol 52-b
 - diabetic management 504-a
 - digitalis 201-a
 - pediatrics 153
 - steroids 206-a
 - visit 151-b
- Pressor agents 201-c
- Pressure-limited respirators 251-b
- Propranolol 205-c
- Prostigmine 204-a-3
- Prolamine 403-e
- Pseudocholinesterase 204-b-2
- Pulmonary edema 354-h
- Pulmonary emboli 354-b
- Pulmonary insufficiency 255-f-8
- Pyloromyotomy 160-b
- Q-R
- Regional anesthesia
 - axillary 104
 - brachial plexus 104
 - caudal 103
 - celiac plexus 100
 - epidural 103
 - intravenous 105
 - spinal 102
 - stellate ganglion 100
- Regional enteritis 655-d
- Renal failure 603-a
- Respiration
 - anatomy 351
 - apneic oxygenation 253-h

- aspiration pneumonia 255-f-4
- asthma 354-c
- biochemistry 352-c
- bronchospasm 354-f
- compliance 352
- emphysema 354-a
- histamine 208-a, 352-e
- humidification 252
- hypercarbia 353-a
- hypocarbica 353-b
- lung volumes 352-c
- mechanics 352-c
- oxygen administration 253-a
- oxygen toxicity 253-d
- physiology 352
- pulmonary edema 354-h
- pulmonary emboli 354-b
- respirators 251
- respiratory stimulants 202-a
- shock 255-f-1
- spirometry 352-c
- surfactant 352-c
- tracheostomy 255-d
- Respiratory stimulants 202-a
- Resuscitation 306
- Resuscitator bags 706-c
- Risk 151-a
- RNA 507-c
- S
- Scopolamine 205-f
- Shivering 508-d
- Shock 255-f-1
- Sickle-cell anemia 402-b
- Sleep 3
- Snakebite 211-b
- Soda lime 706-a-1
- Sodium 206-d-2
- Special techniques
 - awake intubation 255-a-2
 - carotid artery surgery 159-c
 - cesarean section 154-a
 - induced hypotension 158-c-1
 - induced hypothermia 156-a
 - nasotracheal intubation 255-c-1
 - neurosurgical anesthesia 156
 - obstetrics 154
 - open-heart 159-a
 - pediatrics 153
- Spinal 102
- Spirometry 252-c
- Statistics 708
- Sterilization 706-a-3
- Steroids 206-a
- Subclavian 305-a
- Succinylcholine 204-b-1
- Surfactant 352-c
- Sweating 508
- Synapse
 - acetylcholine 458-a
 - ANS 451-b
 - neuromuscular junction 458-a
- T
- Temperature 508, 706-h
- Teratogenicity 507-d
- Tetanus 458-b
- Tetracaine 101-c
- Tetralogy of Fallot 303-d
- Theories of narcosis 3
- Thoracic surgery techniques 159
- Thrombosis 305-b
- Thyroid 502
- Tic doloureux 106-a
- Tidal volume 352-c
- Tourniquet 162-b
- Toxemia 553-b
- Trachea 351
- Tracheoesophageal fistula 159-d
- Tracheostomy 255-d
- Transfusion reactions 404-a
- Transurethral resections 161-a
- Trauma
 - aspiration pneumonia 255-f-4
 - blood transfusion 404-d
 - blood volume 404-g
 - burns 255-f-5
 - cardiac output 302-a
 - hypoxia 253-f
 - mass casualties 152-d
 - respirators 251
 - resuscitation 306
 - shock 255-f-1
 - volume expanders 506
- Tuberculosis 354-f
- U-V
- Ultrasonic nebulization 252-a
- Uptake and distribution 2
- Uremia 603-b-1
- Urology 161
- Vaginal delivery 154-b
- Valium 53-b
- Vaporizers 706-a-4
- Valvular disease 303-c
- Ventilators 251
- Volume expanders 506
- Volume-limited respirators 251-a
- Vomiting
 - antiemetics 208-a
 - aspiration pneumonia 255-f-4
 - physiology 652-a
- W-X-Y-Z
- War anesthesia 152-d
- Wright respirometer 706-c-5
- Xylocaine 101-b