## Subject Index to Volume 50 (2005)

<table>
<thead>
<tr>
<th>Month</th>
<th>Start Page</th>
<th>End Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN</td>
<td>1–144</td>
<td></td>
</tr>
<tr>
<td>FEB</td>
<td>145–312</td>
<td></td>
</tr>
<tr>
<td>MAR</td>
<td>313–408</td>
<td></td>
</tr>
<tr>
<td>APR</td>
<td>409–568</td>
<td></td>
</tr>
<tr>
<td>MAY</td>
<td>569–680</td>
<td></td>
</tr>
<tr>
<td>JUN</td>
<td>681–856</td>
<td></td>
</tr>
<tr>
<td>JUL</td>
<td>857–1000</td>
<td></td>
</tr>
<tr>
<td>AUG</td>
<td>1001–1112</td>
<td></td>
</tr>
<tr>
<td>SEP</td>
<td>1113–1272</td>
<td></td>
</tr>
<tr>
<td>OCT</td>
<td>1273–1400</td>
<td></td>
</tr>
<tr>
<td>NOV</td>
<td>1401–1576</td>
<td></td>
</tr>
<tr>
<td>DEC</td>
<td>1577–1704</td>
<td></td>
</tr>
</tbody>
</table>

### A

#### Abstracts

*Open Forum–2005*, 1467

**Acinetobacter species**
in ventilator-associated pneumonia, 746

**Acute chest syndrome**
intermittent positive expiratory pressure vs incentive spirometry in, 624

**Acute respiratory distress syndrome (ARDS)**
chest wall in, 89
lung compliance in, 236
lung protective ventilation and work of breathing in, 1614 (editorial), 1623
multiple-system organ failure in, 646
physiologic dead space measurement, 462
piston position and CO₂ elimination, in high-frequency ventilation, 361
pressure-volume curves in, 78
respiratory mechanics and ventilator waveforms, 235
ventilator-associated pneumonia in, 755
volumetric capnography in (editorial), 457

**Adherence, patient.** *See Patient compliance*

**Adolescents**
metered-dose and dry powder inhalers for asthma, 1323

**Aerosols and aerosol administration**

albuterol delivery
during noninvasive positive-pressure ventilation, 1649
via tracheostomy tube, 1071
cascade impactor temperature and, 1077
distribution and positive expiratory pressure, in cystic fibrosis, 1438
drug delivery issues, 1228
dry powder inhalers
for children, 1323

cconference proceedings, 1138, 1304
conference summary, 1376
formulations for, 1209
overview, 1304
for gene therapy, 1166
history of, 1139
The inhalation of drugs: advantages and problems (Kittredge Lecture), 367
inhaled insulin, 1163
metered-dose inhalers
for children, 1323
conference proceedings, 1138, 1304
conference summary, 1376
pressurized, 1191, 1331
nebulizers vs inhalers, clinical features, 1313
in noninvasive positive-pressure ventilation (editorial), 1621
patient compliance with regimen, 1346
inhaler demonstrations and, 598
patient-device interactions and drug deposition, 1151
for systemic drug delivery, gene therapy, and vaccination, 1161
The true cost of aerosol therapy (letter), 1083
for vaccination, 1169

**Airway care and management**
book review

*Essentials of airway management* (Dolenska S et al), 389
expiratory rib cage compression and, 1430
tracheostomy and, 535

**Airway obstruction**
measurement in mechanical ventilation, 110

**Airway pressure**
in manual ventilation, 340
pressure-volume curves, 78
Airway resistance
Dynamic hyperinflation, intrinsic positive end-expiratory pressure, and respiratory rate (letter), 386
Expiratory rib-cage compression, airway suctioning, and atelectasis (letter), 387
tracheostomy and, 478, 527, 528
Airways, artificial
in ventilator-associated pneumonia, 900
Albuterol
delivery during noninvasive ventilation, 1649
delivery via tracheostomy tube, 1071
Allergies
book review
The Washington manual: allergy, asthma, and immunology subspecialty consult (Jost BC et al), 394
American Association for Respiratory Care
OPEN FORUM abstracts–2005, 1467
Animal models
porcine, for cardiac arrest, 628
Anisocoria
ipratropium-bromide-induced, from ill-fitting face mask, 1662
Antibiotic drugs
de-escalation in ventilator-associated pneumonia, 970
nitric oxide and nosocomial pneumonia bacteria, 1428
for ventilator-associated pneumonia, 932
Antimicrobial drugs
aerosol delivery of, 947
classes of, 934
pharmacokinetics, 934
prophylactic, for ventilator-associated pneumonia prevention, 729
for ventilator-associated pneumonia, 932
Antimicrobial resistance
selective decontamination of digestive tract and, 910
in ventilator-associated pneumonia, 718, 792, 932
Aspiration
tracheostomy and, 547
Asthma
book reviews
Pharmacology and therapeutics of asthma and COPD (Page CP, Barnes PJ), 662
The Washington manual: allergy, asthma, and immunology subspecialty consult (Jost BC et al), 394
inhalation devices for, history of, 1143
inhaler demonstrations and patient compliance (editorial), 598
metered-dose and dry powder inhalers for children, 1323
patient counseling about inhaler technique, 617
pressure-volume curves in, 93
Asynchrony, patient-ventilator
in chronic obstructive pulmonary disease, 248, 253
expiratory, 228
flow, 212
graphics identifying, 202
lung protective ventilation and work of breathing, 1623
termination, 225
trigger, 204
Atelectasis
in lung-protective mechanical ventilation, 768
Auscultation and breath sounds
book reviews
Breath sounds made incredibly easy! (Hausauer J, Haynes N), 395
Fundamentals of lung and heart sounds, 3rd ed (Wilkins RL et al), 295
software review
R.A.L.E. lung sounds 3.1 professional edition, 1385
The stethoscope—obsolescence or marriage (letter), 660
Bacteria
nitric oxide as bactericidal agent (editorial), 1428
in ventilator-associated pneumonia, 744
Bag ventilation. See Ventilation, manual
Barotrauma
manual ventilation
peak pressures during, 340
risk factors (editorial), 338
ventilator-induced lung injury (Egan Lecture), 646
Bench evaluations
closed suctioning systems and ventilator performance, 345
helium-oxygen gas mixtures in mechanical ventilators, 354
home volume ventilators supporting open-circuit mouth-piece, 1457
inhalation devices, patient-device interactions, and drug deposition, 1151
oxygen-powered resuscitator vs manual ventilation, 1445
piston position and CO₂ elimination in high-frequency ventilation, 361
Biotrauma
from mechanical ventilation, 644
Blood gases
book review
Clinical blood gases: assessment and intervention, 2nd ed (Malley WJ), 294
Blood pressure
positive-pressure ventilation and venous return, 262
reduced ventilation frequency in CPR, 628
Book reviews
ACP medicine, 2004-2005 edition (Dale DC, Federman DD), 128
Breath sounds. See Auscultation and breath sounds

Bronchoalveolar lavage
for ventilator-associated pneumonia diagnosis, 797

Bronchodilators, bronchodilatation and bronchodilator administration
history of, 1139
in noninvasive positive-pressure ventilation (editorial), 1621
pressurized metered dose inhalers in mechanical ventilation, 1331

Bronchoscopy
fiberoptic, for ventilator-associated pneumonia diagnosis, 797

Burns
ventilator-associated pneumonia and, 757

C

Capnography and capnometry
book review
Capnography: clinical aspects. Carbon dioxide over time and volume (Gravenstein MD et al), 1667
volumetric
in acute respiratory distress syndrome (editorial), 457
in respiratory dead space measurement, 462
waveforms in mechanical ventilation, 100

Carbon dioxide
piston position and elimination of, in high-frequency ventilation, 361
waveforms in mechanical ventilation, 100

Cardiopulmonary resuscitation (CPR). See Resuscitation

Case reports
cystic fibrosis with celiac disease in adult, 644
paraquat poisoning, 383
sirolimus-induced interstitial pneumonitis, in kidney transplantation, 1659

Catheterization
esophageal and gastric pressure measurements, 68

Celiac disease
with cystic fibrosis, in adults, 644

Chest compression
expiratory, in mechanical ventilation, 1430

Chest imaging
book review
Cardiopulmonary imaging (Kazerooni EA, Gross BH), 297

Chest physical therapy
Expiratory rib-cage compression, airway suctioning, and atelectasis (letter), 387
expiratory rib cage compression, in mechanical ventilation, 1430

Child
metered does and dry powder inhalers for asthma in, 1323

Chlorofluorocarbons
in metered dose inhalers, 1192
transition to hydrofluoroalkanes, drug development and, 1201

Chronic lung disease
book review
Supportive care in respiratory disease (Ahmedzai SH, Muers MF), 1668

Chronic obstructive pulmonary disease (COPD)
book reviews
Acute exacerbations in chronic obstructive pulmonary disease (Siafakas NM et al), 126
Fast facts—chronic obstructive pulmonary disease, 2nd ed (MacNee W, Rennard SI), 127
Long-term intervention in chronic obstructive pulmonary disease (Pauwels RA et al), 1085
Pharmacology and therapeutics of asthma and COPD (Page CP, Barnes, PJ), 662
Recent advances in the pathophysiology of COPD (Hansel TT, Barnes PJ), 1464
exacerbations, noninvasive positive-pressure ventilation for, 596, 610
nebulizers vs inhalers for, 1313
office spirometry and, 1619 (editorial), 1639
ventilator-associated pneumonia in, 757
ventilator graphics and respiratory mechanics, 246

Clinical pulmonary infection score
in ventilator-associated pneumonia, 790

Communication
book review
Difficult conversations in medicine (Macdonald E), 1465

Compliance, lung
in acute respiratory distress syndrome, 236
pressure-volume curves, 78
ventilator circuit signals and, 55

Computer simulation
inhaled drug delivery, 1228

Conference proceedings
applied respiratory physiology, 26, 166
in acute lung injury, 235
capnographic waveforms in mechanical ventilation, 100
in chronic obstructive pulmonary disease, 246
esophageal and gastric pressure measurements, 68
foreword, 26
measurement of air trapping, PEEP, and dynamic hyperinflation, 110
patient-ventilator asynchrony, 202
pressure-volume curves, 78
respiratory mechanics monitoring, 28
summary, 287
ventilator circuit signals and respiratory mechanics, 55
ventilator graphics and dual-control mode settings, 187
ventilator waveforms and pressure support ventilation, 166
in ventilator weaning, 275
waveform analysis in hemodynamically unstable patients, 262
metered-dose and dry powder inhalers, 1138, 1304
chlorofluorocarbon to hydrofluoroalkane transition, 1201
clinical features of nebulizers and inhalers, 1313
drug delivery issues, 1228
dry powder inhalers
formulations for 1209
overview, 1304
expanding role of aerosols, 1161
history of aerosol therapy, 1139
inhalation therapy in mechanical ventilation, 1331
metered dose inhalers
design principles, 1177
optimizing aerosol delivery by, 1191
patient adherence to aerosol regimen, 1346
patient-device interactions and deposition, 1151
for pediatric patients, 1323
problems with inhaler use, 1360
summary, 1376
tracheostomy (New Horizons Symposium)
anatomy and physiology, 476
decannulation, 538
early complications of, 511
evidence-based management, 516
facilitating speech with, 519
history of, 473
indications for and timing of, 483
late complications, 542
long-term care and, 534
techniques, 488
tubes and related appliances, 497
ventilator weaning and, 526
ventilator-associated pneumonia, 712, 892
antimicrobial treatment of, 932
artificial airways issues in, 900
clinical diagnosis, 788
cost-effectiveness issues, 956
definition and importance of, 714
foreword, 712
gastrointestinal tract in, 910
ICU environment and, 813
laboratory diagnosis, 797
lung-protective ventilation strategies and risk of, 766
management of, 965
microbiology of, 742
noninvasive positive-pressure ventilation for, 924
pathogenesis, 725
patient positioning, 892
summary, 975
ventilator circuit and, 774
Continuous positive airway pressure (CPAP)
in ventilator-associated pneumonia, 924
Corticosteroids. See Steroids
Cost-effectiveness and cost issues
inpatient respiratory care, 1033
The true cost of aerosol therapy (letter), 1083
in ventilator-associated pneumonia, 956
Critical care. See Intensive care
Cross infection
colonization routes in ventilator-associated pneumonia, 814
in ventilator-associated pneumonia, 725
Cuffs, tracheal tube
cuff-leak test, limited value of (editorial), 1617
leak test predicting post-extubation stridor, 1632
in ventilator-associated pneumonia, 900
Customer service
book review
Leadership for great customer service: satisfied patients, satisfied employees (Mayer TA, Cates RJ), 984
Cystic fibrosis
book review
Cystic fibrosis: a guide for patient and family, 3rd ed (Orenstein DM), 392
with celiac disease, in adults, 644
inhaled complementary DNA for, 1166
positive expiratory pressure and aerosol distribution, 1438

D

Delivery of health care
inpatient respiratory care, changing patterns of, 1033
Diabetes mellitus
inhaled insulin for, 1163
Disease models, animal
pigs, auto-regulated inspiratory support during rebreathing in, 1050
Donald F Egan Memorial Lecture 2004
Ventilator-induced lung injury: from barotrauma to bio-trauma, 646
Dose-response relationships
wood smoke inhalation and alveolar instability, 1062
Drug delivery systems
aerosol
optimizing in pressurized metered-dose inhalers, 1191
for systemic drug delivery, gene therapy, and vaccination, 1161
albuterol delivery via tracheostomy tube, 1071
chlorofluorocarbon to hydrofluoroalkane transition in,
1201
dry powder inhalers
 formulations, 1209
 overview, 1304
inhaled, issues in, 1228
metered-dose and dry powder inhalers in children, 1323
nebulizers vs inhalers, clinical features of, 1313
patient-device interactions and drug deposition, 1151
pressurized metered-dose inhalers in mechanical ventilation, 1331
Dry powder inhalers
 for asthma in children, 1323
chlorofluorocarbon to hydrofluoroalkane transition, 1201
conference proceedings, 1138, 1304
conference summary, 1376
drug delivery issues and, 1228
drug formulations for, 1209
history of, 1139
The inhalation of drugs: advantages and problems (Kittredge Lecture), 367
for inhalation therapy in mechanical ventilation, 1331
nebulizers and metered-dose inhalers vs, clinical features, 1313
patient compliance, 1346
patient education
demonstrations and compliance with regimen, 598
technique counseling and effectiveness of, 617
usage problems and, 1360
technique, 1382
Dyspnea and dyspnea assessment
noninvasive positive-pressure ventilation in COPD exacerbations, 610

E
Edema
laryngeal, endotracheal tube cuff-leak test for, 1632

Editorials
Aerosol bronchodilator therapy during noninvasive positive-pressure ventilation: a peek through the looking glass, 1621
Assessing the dose of supplemental oxygen: let us compare methodologies, 594
Inhalers in asthma management: is demonstration the key to compliance, 598
Is there too much “pulmonary” in cardiopulmonary resuscitation? 601
Limited value of the cuff-leak test, 1617
Lung protection: the cost in some is increased work of breathing. Is it too high? 1614
Manual ventilation and risk of barotrauma: primum non nocere, 33
Minute ventilation: it takes time to get it right, 459
New ventilator modes: the shape of things to come? 1029
Nitric oxide as a bactericidal agent: is the cure worse than the disease? 1428
Noninvasive positive-pressure ventilation in patients with chronic obstructive pulmonary disease exacerbation: not too late but not too soon? 596
Office spirometry is 30 years old, but is not mature, 1619
Promoting professionalism and reducing staff turnover in respiratory care, 1029
Ventilation during cardiopulmonary resuscitation: the right tool for the job, 1426
Volumetric capnography in acute respiratory distress syndrome: is the era of day-to-day monitoring finally here? 457

Education, continuing
CRCE through the Journal—2005, 1091, 1399 (answer key)
Egan Lecture. See Donald F Egan Memorial Lecture 2004

Emphysema
pressure-volume curves in, 92

Environmental health
book review
The mold survival guide for your home and for your health (May JC, May CL), 667

Equipment and supplies
book review
Mosby’s respiratory care equipment, 7th ed (Cairo JM, Pilbeam SP), 1462
home volume ventilators, 1457
respiratory, in ventilator-associated pneumonia, 732
The stethoscope—obsolescence or marriage (letter), 660
tracheostomy tubes and appliances, 497

Esophageal pressure
measurement of, 68

Evidence-based practice
book reviews
Evidence-based management of patients with respiratory failure (Esteban A et al), 553
Evidence-based practice manual: research and outcome measures in health and human services (Roberts AR, Yeager KR), 1089
respiratory mechanics and ventilator weaning, 275
tracheostomy management, 516

Exercise
book reviews
ACSM’s exercise management for persons with
chronic diseases and disabilities, 2nd ed (Durstine JL, Moore GE), 663

Physiology of sport and exercise, 3rd ed (Wilmer JH, Costill DL), 295

Principles of exercise testing and interpretation: including pathophysiology and clinical applications, 4th ed (Wasserman K et al), 985

Exubation

cuff-leak test, limited value of (editorial), 1617
terminal, respiratory therapists’ attitudes toward, 1046
tracheal tube cuff leak test and stridor following, 1632
of tracheostomy tube, 538

Handheld computers

book review
Handhelds in medicine: a practical guide for clinicians (Strayer SM et al), 1384

Heart arrest

porcine model, reduced ventilation frequency during CPR, 628

Heart auscultation

book review
Fundamentals of lung and heart sounds, 3rd ed (Wilkins RL et al), 295

Heart failure, congestive

pressure-volume curves in, 92

Heat and moisture exchangers

saturation and flow rate effects on resistance, 636
ventilator-associated pneumonia risk and, 778

Helium-oxygen gas mixture

for chronic obstructive pulmonary disease, 256
in mechanical ventilators, 354

Hemodynamics

waveform analysis and, 262

High-frequency oscillation

piston position in CO₂ elimination and gas displacement, 361

Hospitalization

inpatient respiratory care, changing patterns of, 1033

Humidifiers and humidification

inhaled drug delivery and, 1228
for tracheostomy, 478, 536

Hydrofluoroalkanes

in metered does inhalers, 1193
transition to chlorofluorocarbons, drug development and, 1201

Hypercapnia and hypercarbia

in lung-protective mechanical ventilation, 767

Hyperinflation, dynamic

in mechanical ventilation, 110

Hypertension

intra-abdominal, pressure-volume curves, 78

Immune disorders

book review
The Washington manual: allergy, asthma, and immunology subspecialty consult (Jost BC et al), 394
ventilator-associated pneumonia and, 757

Immunosuppressive agents

sirolimus-induced interstitial pneumonitis (case report), 1659

Inhalation devices. See also Dry powder inhalers; Metered-dose inhalers
albuterol delivery via tracheostomy tube, 1071
chlorofluorocarbon to hydrofluoroalkane transition, 1201
demonstrations and asthma patient compliance (editorial), 598
drug delivery issues and, 1228
history of, 1139
The inhalation of drugs: advantages and problems (Kit-
tredge Lecture), 367
misuse of, patient education and, 1360
patient-device interactions and drug deposition, 1151
Insulin
aerosol delivery of, 1163
Intensive care
book reviews
Clinical intensive care and acute medicine, 2nd ed (Hillman K, Bishop G), 1255
Essentials of pediatric intensive care (Stack CG, Dobbs P), 1464
Oxford handbook of acute medicine, 2nd ed (Ramra-
khya PS, Moore KP), 1253
Q&A color review of general critical care (Horst
HM, Karmy-Jones RC), 1255
Surviving intensive care (Angus DC, Carlet J), 1256
software review
Critical care handbook of the Massachusetts General
Hospital, 3rd ed, for PDA (Hurford WE), 842
Intensive care units (ICU)
book review
ICU recall, 2nd ed (Thaemert NL, Tribble CG), 391
environment and ventilator-associated pneumonia, 813
ipratropium-bromide-induced anisocoria, from ill-fitting
face mask, 1662
Internal medicine
book review
ACP Medicine, 2004-2005 edition (Dale DC, Fed-
eman DD), 128
Intubation, endotracheal
tracheostomy vs., 479
Ipratropium
causing acute anisocoria, in ICU, 1662

K
Kidney transplantation
sirolimus-induced interstitial pneumonitis in (case re-
port), 1659
Kinetic therapy
for ventilator-associated pneumonia prevention, 892
Kittredge Lecture. See Philip Kittredge Memorial Lec-
ture 2004

L
Laboratory methods
for ventilator-associated pneumonia diagnosis, 797
Letters to the editor
Dynamic hyperinflation, intrinsic positive end-expira-
tory pressure, and respiratory rate (and response), 386
Expiratory rib-cage compression, airway suctioning, and
atelectasis (and response), 387
Methemoglobinemia and pulse oximetry (and response), 386
The stethoscope—obsolescence or marriage, 660
The true cost of aerosol therapy (and response), 1083
Long-term care
tracheostomy and, 534
Lung cancer
inhaled DNA for, 1168
Lung diseases and disorders
book reviews
Diffuse lung disease: a practical approach (Baugh-
man RP et al), 1086
Interventional pulmonary medicine (Beamis JF et al), 554
Lung development and regeneration (Massaro DJ et
al), 839
patient education reducing misuse of metered-dose in-
halers, 1040
Lung injury
acute
auto-regulated inspiratory support during rebreathing,
in pigs, 1050
respiratory mechanics and ventilator waveforms, 235
volumetric capnography in (editorial), 457
work of breathing in lung-protective ventilation, 1623
ventilatory-induced (Egan Lecture), 646
wood smoke inhalation and alveolar instability, 1062
Lung mechanics
in acute lung injury, 235
asthma vs. COPD, 112
in chronic obstructive pulmonary disease, 246
esophageal and gastric pressure measurements, 68
heat and moisture exchanger resistance, 636
monitoring during mechanical ventilation, 28
peak pressures in manual ventilation, 340
pressure-volume curves, 78
tracheostomy and, 478
ventilator circuit signals and, 55
Lung sounds. See Auscultation and breath sounds

M
Mechanical ventilation
antimicrobial effect of nitric oxide in, 1451
applied physiology, conference proceedings, 26, 166
arterial systolic pressure variation, 268
biotrauma from, 644
capnographic waveforms in, 100
closed endotracheal suctioning systems in, 345
closed-loop, auto-regulated inspiratory support vs, 1050
colonization routes in ventilator-associated pneumonia, 814
COPD pathophysiology in, 246
dual-control modes, ventilator graphics in, 187
expiratory rib-cage compression in, 1430
heat and moisture exchanger resistance, 636
helium-oxygen mixtures in, 354
high-frequency, piston position and CO₂ elimination, 361
inhalation therapy with metered-dose and dry powder inhalers, 1331
lung injury from (Egan Lecture), 646
lung-protective strategies and ventilator-associated pneumonia risk, 766
work of breathing in, 1614 (editorial), 1623
manual ventilation supplementing, 340
minute (editorial), 459
New ventilator modes: the shape of things to come? (editorial), 1029
patient-ventilator asynchrony, 202
pressure-volume curves, 78
respiratory dead space measurement with volumetric capnography, 462
respiratory mechanics
monitoring and signal processing, 28
ventilator circuit signals, 55
respiratory therapists’ attitudes toward terminal extubation, 1046
Medication errors
metered-dose inhalers, patient education reducing misuse, 1040
Metered-dose inhalers
accessory devices for, 1193
albuterol delivery during noninvasive positive-pressure ventilation, 1649
for asthma in children, 1323
breath-actuated, 1183, 1193
for bronchodilator therapy in noninvasive positive-pressure ventilation (editorial), 1621
chlorofluorocarbon to hydrofluoroalkane transition, 1201
conference proceedings, 1138, 1304
conference summary, 1376
design principles for, 1177, 1192
drug delivery issues and, 1228
drug formulation for, 1179
effective use of, 1194
history of, 1139
nebulizers and dry powder inhalers vs, clinical features of, 1313
optimizing aerosol delivery by, 1191
patient compliance with aerosol regimen, 1346
patient education and effectiveness of, 1195
reducing misuse of, 1040
usage problems and, 1360
pressurized, 1178, 1331
propellants for, 1192
spacer devices, 1185
technique, 1382
Methemoglobinemia
Methemoglobinemia and pulse oximetry (letter), 386
Microscopy
wood smoke inhalation and alveolar instability, 1062
Minute ventilation
baseline measurement and recovery time calculation, 468
weaning parameters and (editorial), 459
Models, theoretical
inhaled drug delivery and, 1228
Molds
book review
The mold survival guide for your home and for your health (May JC, May CL), 667
Monitoring
book review
Monitoring of respiration and circulation (Blom JA), 1384
esophageal and gastric pressure measurements, 68
metabolic, respiratory dead space measurement in ARDS, 462
respiratory mechanics during mechanical ventilation, 28
Mucociliary clearance
book review
Therapy for mucus-clearance disorders (Rubin BK, van der Schans CP), 1462
Multiple-system organ failure
in acute respiratory distress syndrome, 646
N
Nebulizers and vaporizers. See also Inhalation devices
albuterol delivery during noninvasive positive-pressure ventilation, 1649
via tracheostomy tube, 1071
book review
Practical handbook of nebulizer therapy (Boe J et al), 125
for bronchodilator therapy in noninvasive positive-pressure ventilation (editorial), 1621
cascade impactor temperature affecting performance, 1077
clinical features of, 1313
history of, 1139
The inhalation of drugs: advantages and problems (Kittredge Lecture), 367
patient-device interactions and drug deposition, 1151
ventilator-associated pneumonia risk and, 782
Neonatal diseases and disorders
capnographic waveforms in mechanical ventilation, 104
New Horizons Symposium. See Conference proceedings
Nitric oxide
antimicrobial effects of, 1451
as bactericidal agent (editorial), 1428
Noninvasive positive-pressure ventilation
albuterol delivery during, 1649
bronchodilator therapy in
editorial, 1621
with pressurized metered dose inhalers, 1331
in COPD exacerbation, 596, 610
open-circuit mouthpiece, home volume ventilators supporting, 1457
in ventilator-associated pneumonia, 924
Nosocomial diseases
antimicrobial effects of nitric oxide in pneumonia, 1451
ventilator-associated pneumonia, 714
O
Office procedures
spirometry 1619 (editorial), 1639
Open Forum
abstracts–2005, 1467
Organization and administration
annual retreat and process improvement, 1654
Outcome assessment
inpatient respiratory care, changing patterns of, 1033
Oximeters and oximetry
Methemoglobinemia and pulse oximetry (letter), 386
Oxygen administration and therapy
book review
Adventures of an oxy-phile (Petty TL), 1669
ipratropium-bromide-induced anisocoria, from ill-fitting face mask, 1662
nasal cannulas, low-flow vs high-flow, 604
supplemental oxygen dosage (editorial), 594
P
Palliative care
respiratory therapists’ attitudes toward terminal extubation, 1046
Paraquat
poisoning by, 383
Patient compliance
with aerosol regimen, 1346
inhaler demonstrations and asthma management (editorial), 598
Patient education
inhaler demonstrations and asthma management, 598, 617
inhaler use problems and, 1040, 1360
metered-dose inhalers, 1195
Patient positioning
ventilator-associated pneumonia and, 892
Patient satisfaction
book review
Leadership for great customer service: satisfied patients, satisfied employees (Mayer TA, Cates RJ), 984
intermittent positive expiratory pressure vs incentive spirometry, in sickle cell disease, 624
PDAs. See Handheld computers
Peak inspiratory pressure
helium-oxygen gas mixtures, 354
Pesticides
paraquat poisoning, 383
Pharmacists
patient counseling about inhaler technique, 617
pH (hydrogen ion concentration)
gastric, in ventilator-associated pneumonia, 910
Philip Kittredge Memorial Lecture 2004
The inhalation of drugs: advantages and problems, 367
Physical examination
book review
Writing and defending your IME report: the comprehensive guide (Babitsky S et al), 298
Physiology, respiratory. See Respiratory physiology
Pneumonia
interstitial, sirolimus-induced (case report), 1659
ventilator-associated
antimicrobial effects of nitric oxide in, 1451
antimicrobial resistance in, 718
antimicrobial treatment of, 932
artificial airways issues, 900
clinical resolution of, 969
combination therapy for, 947
conference proceedings, 712, 892
conference summary, 975
continuous positive airway pressure for, 924
cost-effectiveness issues, 956
definition, 714, 976
diagnosis, 979
clinical, 788
laboratory methods, 797
gastrointestinal tract in, 910
ICU environment and, 813
lung-protective ventilation strategies, 766
management of, 965, 979
microbiology of, 742, 967, 977
morbidity and mortality, 715
noninvasive positive-pressure ventilation for, 924
pathogenesis, 716, 725, 814, 976
patient positioning and, 892
prevention of, 818, 978
selective decontamination of digestive tract in, 910
tracheostomy and, 485, 547
ventilator circuit and, 774

Poisoning and toxicity
paraquat poisoning, 383

Positive airway pressure
measurement in mechanical ventilation, 110

Positive end-expiratory pressure (PEEP)
closed suctioning systems and ventilator performance, 345
Dynamic hyperinflation, intrinsic positive end-expiratory pressure, and respiratory rate (letter), 386
helium-oxygen gas mixtures in mechanical ventilators, 354
intrinsic
in dual-control ventilation, 187
failed ventilator triggering and, 166
measurement in mechanical ventilation, 110
lung protective ventilation and work of breathing (editorial), 1614
waveform analysis in hemodynamically unstable patients, 262

Positive expiratory pressure
aerosol distribution in cystic fibrosis and, 1438
intermittent incentive spirometry vs. for sickle cell disease, 624

Positive-pressure respiration
reduced frequency during CPR, 628

Positive-pressure ventilation
waveform analysis in hemodynamically unstable patients, 262

Postoperative complications
of tracheostomy, 511, 542

Primary care
office spirometry for detecting COPD, 1639

Professional practice
Promoting professionalism and reducing staff turnover in respiratory care (editorial), 1029

Prone positioning
for ventilator-associated pneumonia prevention, 892

 Protected specimen brush
for ventilator-associated pneumonia diagnosis, 797

Pulmonary alveoli
instability and wood smoke inhalation, 1062

Pulmonary circulation
book review
Pulmonary circulation: diseases and their treatment, 2nd ed (Peacock AJ, Rubin LJ), 988
Pulmonary fibrosis
book review
Idiopathic pulmonary fibrosis (Lynch JP III), 840
Pulmonary function testing
book review
Making sense of lung function tests: a hands-on guide (Dakin JH et al), 984

Quality of life
ventilator-associated pneumonia and, 956

Radiology
book review
Thoracic imaging: pulmonary and cardiovascular radiology (Webb WR, Higgins CB), 841

Recovery of function
baseline minute ventilation, measurement of, 468
weaning parameters and minute ventilation (editorial), 468

Rehabilitation, pulmonary
book review
Guidelines for pulmonary rehabilitation programs, 3rd ed (American Association of Cardiovascular and Pulmonary Rehabilitation), 1085

Respiratory care
annual retreat and process improvement, 1654
book reviews
The essentials of respiratory care, 4th ed (Kacmarek RM et al), 1665
Respiratory care made incredibly easy! (Barefoot WC), 1666
inpatient, changing patterns of, 1033

Respiratory care, pediatric
book review
Essential of pediatric intensive care (Stack CG, Dobbs P), 1464
clinical features, nebulizers vs. inhalers, 1313
metered-dose and dry powder inhalers in, 1323

Respiratory dead space
measurement of, volumetric capnography vs metabolic monitoring, 462
tracheostomy and, 527

Respiratory diseases and disorders
book review
Clinical respiratory medicine, 2nd ed (Albert RK et al), 390
Respiratory physiology. See also Lung mechanics; Spirometry
in acute lung injury, 235
applied, conference proceedings, 26, 166
capnographic waveforms in mechanical ventilation, 100
in chronic obstructive pulmonary disease, 246
esophageal and gastric pressure measurements, 68
measurement of air trapping, PEEP, and dynamic hyperinflation, 110
patient-ventilator asynchrony, 202
pressure-volume curves, 78
ventilator circuit signals, respiratory mechanics derived from, 55
ventilator graphics and dual-control mode settings, 187
ventilator waveforms and pressure support ventilation, 166
in ventilator weaning, 275
waveform analysis in hemodynamically unstable patients, 262
Respiratory therapists
attitudes toward terminal extubation, 1046
patient education and metered-dose inhaler compliance, 1040
Promoting professionalism and reducing staff turnover in respiratory care (editorial), 1029
Resuscitation
cardiopulmonary interactions in CPR (editorial), 601
oxygen-powered resuscitator vs manual ventilation, 1445
reduced ventilation frequency in CPR, 628
ventilation during (editorial), 1426
Resuscitators, manual
ventilator-associated pneumonia risk and, 782
Retreats
process improvement and, 1654
Risk factors
ventilator-associated pneumonia and lung-protective ventilation strategies, 766
Rotational therapy
for ventilator-associated pneumonia prevention, 892
Sirolimus
causing interstitial pneumonitis in kidney transplant patient (case report), 1659
Sleep disorders
book reviews
Clinical sleep disorders (Carney PR et al), 1087
Fast facts—obstructive sleep apnea (Phillips B, Naughton MT), 127
Sleep medicine in clinical practice (Silber MH et al), 841
Smoking inhalation
wood smoke and alveolar instability, 1062
Software reviews
ACP medicine, 2004-2005 edition (Dale DC, Federman DD), 128
Critical care handbook of the Massachusetts General Hospital, 3rd ed, for PDA (Hurford WE), 842
R.A.L.E. lung sounds 3.1 professional edition, 1385
Speech
tracheostomy and facilitation of, 519, 536
Spirometry
incentive, intermittent positive expiratory pressure vs, in sickle cell disease, 624
office-based for COPD detection, 1639
editorial, 1619
Sports. See Exercise
Staff development
annual retreat and process improvement, 1654
Staphylococcus aureus
methicillin-resistant, 945
Steroids
inhaled, in children, 1323
nebulizers vs. inhalers for, clinical features, 1313
Stethoscope
The stethoscope—obsolescence or marriage (letter), 660
Stridor
post-extubation, tracheal tube cuff-leak test predicting, 1617 (editorial), 1632
Suction and suctioning devices
closed systems, 345
closed vs. open, 781
expiratory rib cage compression and, 1430
for tracheostomy, 536
ventilator-associated pneumonia risk and, 780
Surgery, thoracic
book review
Clinical scenarios in thoracic surgery (Kalimi R, Faber P), 551
Surveys and questionnaires
office spirometry for detecting COPD, 1639
respiratory therapists’ attitudes toward terminal extubation, 1046
Teaching Case of the Month
ipratropium-bromide-induced acute anisocoria, 1662
paraquat poisoning, 383

Temperature
cascade impactor temperature affecting nebulizer performance, 1077

Terminal care
respiratory therapists’ attitudes toward extubation, 1046

Thoracoscopy
book review
Thoracoscopy for physicians: a practical guide (Buchanan DR, Neville E), 298

Tidal volume
Dynamic hyperinflation, intrinsic positive end-expiratory pressure, and respiratory rate (letter), 386
helium-oxygen gas mixtures in mechanical ventilators, 354
lung-protective ventilation and work of breathing, 1614 (editorial), 1623
oxygen-powered resuscitator vs manual ventilation, 1445

Tracheal stenosis
tracheostomy causing, 543

Tracheoesophageal fistula
tracheostomy causing, 547

Tracheoinnominate artery erosion
tracheostomy causing, 547

Tracheomalacia
tracheostomy causing, 546

Tracheotomy and tracheostomy
anatomy and physiology, 476
book reviews
Percutaneous tracheostomy: a practical handbook (Paws HGW, Bodenham AR), 1258
Tracheostomy: a multiprofessional handbook (RusSELL C, Matta B), 550
complications of, 511, 542
decannulation, 538
dilational, 491
evidence-based management, 516
history of, 488
indications for and timing of, 483
long-term care and, 534
New Horizons symposium, 473
percutaneous, 489
physiologic impact of, 527
speech facilitation in patients with, 519
surgical, 489
techniques, 488, 512
terminology, 474
tubes and related appliances, 497
ventilator-associated pneumonia and, 756, 900
ventilator weaning and, 526

Tuberculosis
book review
Clinical tuberculosis, 3rd ed (Davies PDO), 665

Tubes
endotracheal
size and inhalation therapy, 1331
in ventilator-associated pneumonia, 900
tracheostomy, 497
albuterol delivery via, 1071
talking and, 519

Turbuhaler technique
counseling and effectiveness of, 617

Turnover, personnel
inpatient respiratory care, changing patterns of, 1033
Promoting professionalism and reducing staff turnover in respiratory care, 1029

Ultrasonography
book review
Atlas of chest sonography (Mathis G, Lessnau KD), 987

Vaccination
aerosols for, 1169

Ventilation. See also Mechanical ventilation
during cardiopulmonary resuscitation (editorial), 1426
dual-control, ventilator graphics in, 187
home volume ventilators supporting open-circuit mouthpiece, 1457
manual
barotrauma risk (editorial), 338
oxygen-powered resuscitator vs, 1445
peak pressures during, 340
reduced ventilation frequency in CPR, 628
pressure support
auto-regulated inspiratory support vs, 1050
equation of motion, 171
ventilator waveforms and, 166

Ventilator circuits
home volume ventilators supporting open-circuit mouthpiece, 1457
signal processing
respiratory mechanics and, 55
waveform analysis and, 28
ventilator-associated pneumonia and, 774

Ventilatory patterns
in dual-control ventilation, 187
patient-ventilator asynchrony and, 202

Viruses
in ventilator-associated pneumonia, 753
Waveform analysis
in acute lung injury, 235
art and, 288
capnographic, in mechanical ventilation, 100
in chronic obstructive pulmonary disease, 246
conference proceedings, 26, 166
summary, 287
in hemodynamically unstable patients, 262
in mechanical ventilation, 110
patient-ventilator asynchrony identification, 202
pressure support ventilation physiology, 166
respiratory mechanics and ventilator circuit signals, 55
signal processing in ventilators, 28
ventilator graphics in dual-control modes, 187
weaning from ventilator, 275

Weaning from ventilatory support
auto-PEEP and failure of, 119
delays in, 779
minute ventilation and
  baseline measurement and recovery time calculation, 468
  editorial, 459
respiratory mechanics and waveform analysis, 275
tracheostomy and, 476, 485, 526

Work of breathing
esophageal and gastric pressure measurements, 68
lung-protective ventilation and, 1614 (editorial), 1623
measurement in mechanical ventilation, 110
noninvasive positive-pressure ventilation and, 610
patient-ventilator asynchrony, 202
tracheostomy and, 478, 528

Wounds and injuries
ventilator-associated pneumonia in trauma patients, 757