Subject Index to Volume 50 (2005)

1–144 JAN
145–312 FEB
313–408 MAR
409–568 APR
569–680 MAY
681–856 JUN
857–1000 JUL
1001–1112 AUG
1113–1272 SEP
1273–1400 OCT

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
conference 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 (Kit-tredge 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
inhaled insulin, 1163
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
B
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 mouthpiece, 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
ACSM’s exercise management for persons with chronic diseases and disabilities, 2nd ed (Durstine JL, Moore GE), 663
Acute exacerbations in chronic obstructive pulmonary disease (Siafakas NM et al), 126
Adventures of an oxy-phile (Petty TL), 1669
Atlas of chest sonography (Mathis G, Lessnau KD), 987
Breath sounds made incredibly easy! (Hausauer J, Haynes N), 395
Capnography: clinical aspects. Carbon dioxide over time and volume (Gravenstein JS et al), 1667
Cardiopulmonary imaging (Kazerouini EA, Gross BH), 297
Clinical blood gases: assessment and intervention, 2nd ed (Malley WJ), 294
Clinical intensive care and acute medicine, 2nd ed (Hillman K, Bishop G), 1255
Clinical respiratory medicine, 2nd ed (Albert RK et al), 390
Clinical scenarios in thoracic surgery (Kalimi R, Faber P), 551
Clinical sleep disorders (Carney PR et al), 1087
Clinical tuberculosis, 3rd ed (Davies PDO), 665
Cystic fibrosis: a guide for patient and family, 3rd ed (Orenstein DM), 392
Difficult conversations in medicine (Macdonald E), 1465
Diffuse lung disease: a practical approach (Baughman RP et al), 1086
Essential of pediatric intensive care (Stack CG, Dobbs P), 1464
Essentials of airway management (Dolenska S et al), 389
The essentials of respiratory care, 4th ed (Kacmarek RM et al), 1665
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
Fast facts—chronic obstructive pulmonary disease, 2nd ed (MacNee W, Rennard SI), 127
Fast facts—obstructive sleep apnea (Phillips B, Naughton MT), 127
Fundamentals of lung and heart sounds, 3rd ed (Wilkins RL et al), 295
Guidelines for pulmonary rehabilitation programs, 3rd ed (American Association of Cardiovascular and Pulmonary Rehabilitation), 1085
Handhelds in medicine: a practical guide for clinicians (Strayer SM et al), 1384
ICU recall, 2nd ed (Thaemert NL, Tribble CG), 391
Idiopathic pulmonary fibrosis (Lynch JP III), 840
Interventional pulmonary medicine (Beamis JF et al), 554
Leadership for great customer service: satisfied patients, satisfied employees (Mayer TA, Cates RJ), 984
Long-term intervention in chronic obstructive pulmonary disease (Pauwels RA et al), 1085
Lung development and regeneration (Massaro DJ et al), 839
Making sense of lung function tests: a hands-on guide (Dakin JH et al), 984
The mold survival guide for your home and for your health (May JC, May CL), 667
Monitoring of respiration and circulation (Blom JA), 1384
Mosby’s respiratory care equipment, 7th ed (Cairo JM, Pilbeam SP), 1462
Oxford handbook of acute medicine, 2nd ed (Ramrakha PS, Moore KP), 1253
Percutaneous tracheostomy: a practical handbook (Paw HGW, Bodenham AR), 1258
Pharmacology and therapeutics of asthma and COPD (Page CP, Barnes PJ), 662
Physiology of sport and exercise, 3rd ed (Wilmer JH, Costill DL), 295
Practical handbook of nebulizer therapy (Boe J et al), 125
Principles of exercise testing and interpretation: including pathophysiology and clinical applications, 4th ed (Wasserman K et al), 985
Pulmonary circulation: diseases and their treatment, 2nd ed (Peacock AJ, Rubin LJ), 988
Q&A color review of general critical care (Horst HM, Karmy-Jones RC), 1255
Recent advances in the pathophysiology of COPD (Han sel TT, Barnes PJ), 1464
Respiratory care made incredibly easy! (Barefoot WC), 1666
Sepsis (Ortiz-Ruiz G, et al), 1257
Sleep medicine in clinical practice (Silber MH et al), 841
Supportive care in respiratory disease (Ahmedzai SH, Muers MF), 1668
Surviving intensive care (Angus DC, Carlet J), 1256
Therapy for mucus-clearance disorders (Rubin BK, van der Schans CP), 1462
Thoracic imaging: pulmonary and cardiovascular radiology (Webb WR, Higgins CB), 841
Thoracoscopy for physicians: a practical guide (Buchanan DR, Neville E), 298
Tracheostomy: a multiprofessional handbook (Russell C, Matta B), 550
The Washington manual: allergy, asthma, and immunology subspecialty consult (Jost BC et al), 394
Writing and defending your IME report: the comprehensive guide (Babitsky S et al), 298
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 (Kittrudge 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

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

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

**Extubation**
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

**F**

**Flow and flow rate**
heat and moisture exchangers, resistance and, 636
inhaled drug delivery, 1228
in ventilator signal processing, 33

**Fluids and secretions**
expiratory rib cage compression and removal of, 1430
subglottic drainage, in ventilator-associated pneumonia, 900

**Fraction of inspired oxygen (FI02)**
assessment of, 594
low-flow vs high-flow nasal cannulas, 604
open- vs closed-mouth breathing and, 604

**Fungi**
in ventilator-associated pneumonia, 754

**G**

**Gas exchange**
piston position and CO2 elimination in high-frequency ventilation, 361

**Gastric pressure**
measurement of, 68
oxygen-powered resuscitator vs manual ventilation, 1445
ventilation during cardiopulmonary resuscitation (editorial), 1426

**Gastrointestinal tract**
selective decontamination of, 910
in ventilator-associated pneumonia, 910

**Gene therapy**
aerosol administration of, 1166

**Group processes**
annual retreat and process improvement, 1654

**H**

**Handbooks**
book review
*Oxford handbook of acute medicine, 2nd ed (Ramrakhia PS, Moore KP), 1253

**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

**I**

**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 (Kittredge 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 (Ramrakha 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, Federation DD), 128
Intubation, endotracheal
tracheostomy vs., 479
Ipratropium
causing acute anisocoria, in ICU, 1662

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

Laboratory methods
for ventilator-associated pneumonia diagnosis, 797

Letters to the editor
Dynamic hyperinflation, intrinsic positive end-expiratory 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 (Baughman 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 inhalers, 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
### Subject Index to Volume 50 (2005)

<table>
<thead>
<tr>
<th>Term</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>clinical features of, 1313</td>
<td></td>
</tr>
<tr>
<td>history of, 1139</td>
<td></td>
</tr>
<tr>
<td>The inhalation of drugs: advantages and problems (Kittredge Lecture), 367</td>
<td></td>
</tr>
<tr>
<td>patient-device interactions and drug deposition, 1151</td>
<td></td>
</tr>
<tr>
<td>ventilator-associated pneumonia risk and, 782</td>
<td></td>
</tr>
<tr>
<td><strong>Neonatal diseases and disorders</strong></td>
<td></td>
</tr>
<tr>
<td>capnographic waveforms in mechanical ventilation, 104</td>
<td></td>
</tr>
<tr>
<td><strong>New Horizons Symposium. See Conference proceedings</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Nitric oxide</strong></td>
<td></td>
</tr>
<tr>
<td>antimicrobial effects of, 1451</td>
<td></td>
</tr>
<tr>
<td>as bactericidal agent (editorial), 1428</td>
<td></td>
</tr>
<tr>
<td><strong>Noninvasive positive-pressure ventilation</strong></td>
<td></td>
</tr>
<tr>
<td>albuterol delivery during, 1649</td>
<td></td>
</tr>
<tr>
<td>bronchodilator therapy in editorial, 1621</td>
<td></td>
</tr>
<tr>
<td>with pressurized metered dose inhalers, 1331</td>
<td></td>
</tr>
<tr>
<td>in COPD exacerbation, 596, 610</td>
<td></td>
</tr>
<tr>
<td>open-circuit mouthpiece, home volume ventilators supporting, 1457</td>
<td></td>
</tr>
<tr>
<td>in ventilator-associated pneumonia, 924</td>
<td></td>
</tr>
<tr>
<td><strong>Nosocomial diseases</strong></td>
<td></td>
</tr>
<tr>
<td>antimicrobial effects of nitric oxide in pneumonia, 1451</td>
<td></td>
</tr>
<tr>
<td>ventilator-associated pneumonia, 714</td>
<td></td>
</tr>
</tbody>
</table>

### O

<table>
<thead>
<tr>
<th>Term</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office procedures</td>
<td></td>
</tr>
<tr>
<td>spirometry 1619 (editorial), 1639</td>
<td></td>
</tr>
<tr>
<td><strong>OPEN FORUM</strong></td>
<td></td>
</tr>
<tr>
<td>abstracts–2005, 1467</td>
<td></td>
</tr>
<tr>
<td><strong>Organization and administration</strong></td>
<td></td>
</tr>
<tr>
<td>annual retreat and process improvement, 1654</td>
<td></td>
</tr>
<tr>
<td><strong>Outcome assessment</strong></td>
<td></td>
</tr>
<tr>
<td>inpatient respiratory care, changing patterns of, 1033</td>
<td></td>
</tr>
<tr>
<td><strong>Oximeters and oximetry</strong></td>
<td></td>
</tr>
<tr>
<td>Methemoglobinemia and pulse oximetry (letter), 386</td>
<td></td>
</tr>
<tr>
<td><strong>Oxygen administration and therapy</strong></td>
<td></td>
</tr>
<tr>
<td>book review</td>
<td></td>
</tr>
<tr>
<td><em>Adventures of an oxy-phile</em> (Petty TL), 1669</td>
<td></td>
</tr>
<tr>
<td>ipratropium-bromide-induced anisocoria, from ill-fitting face mask, 1662</td>
<td></td>
</tr>
<tr>
<td>nasal cannulas, low-flow vs high-flow, 604</td>
<td></td>
</tr>
<tr>
<td>supplemental oxygen dosage (editorial), 594</td>
<td></td>
</tr>
</tbody>
</table>

### P

<table>
<thead>
<tr>
<th>Term</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palliative care</td>
<td></td>
</tr>
<tr>
<td>respiratory therapists’ attitudes toward terminal extubation, 1046</td>
<td></td>
</tr>
<tr>
<td><strong>Paraquat</strong></td>
<td></td>
</tr>
<tr>
<td>poisoning by, 383</td>
<td></td>
</tr>
<tr>
<td><strong>Patient compliance</strong></td>
<td></td>
</tr>
<tr>
<td>with aerosol regimen, 1346</td>
<td></td>
</tr>
<tr>
<td>inhaler demonstrations and asthma management (editorial), 598</td>
<td></td>
</tr>
<tr>
<td><strong>Patient education</strong></td>
<td></td>
</tr>
<tr>
<td>inhaler demonstrations and asthma management, 598, 617</td>
<td></td>
</tr>
<tr>
<td>inhaler use problems and, 1040, 1360</td>
<td></td>
</tr>
<tr>
<td>metered-dose inhalers, 1195</td>
<td></td>
</tr>
<tr>
<td><strong>Patient positioning</strong></td>
<td></td>
</tr>
<tr>
<td>ventilator-associated pneumonia and, 892</td>
<td></td>
</tr>
<tr>
<td><strong>Patient satisfaction</strong></td>
<td></td>
</tr>
<tr>
<td>book review</td>
<td></td>
</tr>
<tr>
<td><em>Leadership for great customer service: satisfied patients, satisfied employees</em> (Mayer TA, Cates RJ), 984</td>
<td></td>
</tr>
<tr>
<td>intermittent positive expiratory pressure vs incentive spirometry, in sickle cell disease, 624</td>
<td></td>
</tr>
<tr>
<td><strong>PDAs. See Handheld computers</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Peak inspiratory pressure</strong></td>
<td></td>
</tr>
<tr>
<td>helium-oxygen gas mixtures, 354</td>
<td></td>
</tr>
<tr>
<td><strong>Pesticides</strong></td>
<td></td>
</tr>
<tr>
<td>paraquat poisoning, 383</td>
<td></td>
</tr>
<tr>
<td><strong>Pharmacists</strong></td>
<td></td>
</tr>
<tr>
<td>patient counseling about inhaler technique, 617</td>
<td></td>
</tr>
<tr>
<td><strong>pH (hydrogen ion concentration)</strong></td>
<td></td>
</tr>
<tr>
<td>gastric, in ventilator-associated pneumonia, 910</td>
<td></td>
</tr>
<tr>
<td><strong>Philip Kittredge Memorial Lecture 2004</strong></td>
<td></td>
</tr>
<tr>
<td>The inhalation of drugs: advantages and problems, 367</td>
<td></td>
</tr>
<tr>
<td><strong>Physical examination</strong></td>
<td></td>
</tr>
<tr>
<td>book review</td>
<td></td>
</tr>
<tr>
<td><em>Writing and defending your IME report: the comprehensive guide</em> (Babitsky S et al), 298</td>
<td></td>
</tr>
<tr>
<td><strong>Physiology, respiratory. See Respiratory physiology</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Pneumonia</strong></td>
<td></td>
</tr>
<tr>
<td>interstitial, sirolimus-induced (case report), 1659</td>
<td></td>
</tr>
<tr>
<td>ventilator-associated</td>
<td></td>
</tr>
<tr>
<td>antimicrobial effects of nitric oxide in, 1451</td>
<td></td>
</tr>
<tr>
<td>antimicrobial resistance in, 718</td>
<td></td>
</tr>
<tr>
<td>antimicrobial treatment of, 932</td>
<td></td>
</tr>
<tr>
<td>artificial airways issues, 900</td>
<td></td>
</tr>
<tr>
<td>clinical resolution of, 969</td>
<td></td>
</tr>
<tr>
<td>combination therapy for, 947</td>
<td></td>
</tr>
<tr>
<td>conference proceedings, 712, 892</td>
<td></td>
</tr>
<tr>
<td>conference summary, 975</td>
<td></td>
</tr>
<tr>
<td>continuous positive airway pressure for, 924</td>
<td></td>
</tr>
<tr>
<td>cost-effectiveness issues, 956</td>
<td></td>
</tr>
<tr>
<td>definition, 714, 976</td>
<td></td>
</tr>
<tr>
<td>diagnosis, 979</td>
<td></td>
</tr>
<tr>
<td>clinical, 788</td>
<td></td>
</tr>
<tr>
<td>laboratory methods, 797</td>
<td></td>
</tr>
<tr>
<td>gastrointestinal tract in, 910</td>
<td></td>
</tr>
<tr>
<td>ICU environment and, 813</td>
<td></td>
</tr>
</tbody>
</table>
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
parquat 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

Smoke 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

Scintigraphy
- for drug delivery assessment, 1146

Sedation
- in lung-protective mechanical ventilation, 768

Sepsis
- book review
  - Sepsis (Ortiz-Ruiz G et al), 1257

Sickle cell disease
- intermittent positive expiratory pressure vs incentive spirometry for, 624

Signal processing
- waveform analysis in ventilator monitoring, 28
SUBJECT INDEX TO VOLUME 50 (2005)

T

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

U

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

V

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 mouth-piece, 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 mouth-piece, 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