

Topical Index of Web Based Resources for Critical Care Nursing Educ

Acid Base

Anaesthesia Education Website Acid Base Physiology

http://www.anaesthesiamcq.com/AcidBaseBook/ABindex.php

Provides a variety of acid base tutorials

Acid-Base.org

http://www.acidbase.org/

Reviews acid base physiology

Acute Respiratory Distress Syndrome (ARDS)

ARDS Support Center

http://www.ards.org

Provides information, education, and support resources for patients, survivors, family members

Emedicine by WebMD

Adult Respiratory Distress Syndrome- contains information of differential diagnoses, treatment and medication.

http://emedicine.medscape.com/article/808260-overview

Medscape Today

Lung Recruitment in ARDS: Physiologic concepts and practical strategies. Article discusses strategies such as prone positioning for ARDS treatment.

www.medscape.com/viewarticle/466521

Needs password but free registration

Medscape

Sepsis associated shock, management of ARDS, and mechanical ventilatory strategies. http://www.medscape.com/viewarticle/452476_4

Needs password but free registration

Anatomy

Cardiac Anatomy

Anatomic overview of heart structure, electrical system, and explanation of basic terms of heart function such as preload, afterload, etc. Skills assessment quiz. http://www.skillstat.com/Flash/HeartScape531.html

Dartmouth Medical School

Human Anatomy Learning Modules http://www.dartmouth.edu/~anatomy/index.html

University of Michigan Medical School

Medical Gross Anatomy Learning Module. Contains modules on all systems including test questions with each module.

http://anatomy.med.umich.edu/courseinfo/module_index.html

Anesthesia

World Federation of Societies of Anaesthesiologists

Site offers web-based tutorials of the week, access to Update in Anaesthesia manuscripts and emergency algorithms

http://totw.anaesthesiologists.org

University of Florida's Virtual Anesthesia Machine

Site contains free simulations on topics including alveolar gas equation, airway devices for the difficult airway, and coronary circulation models. Many of the simulations are interactive.

http://vam.anest.ufl.edu/

Critical Care Medicine Tutorials

Tutorials on anesthesia, critical care medicine, pain management, regional anesthesia, and internal medicine. (Beginner and Advanced)

http://www.ccmtutorials.com/

Arrhythmia and EKG Interpretation

Cardiac Rhythm Simulator

SkillsStat Self Testing and Assessment. EKG rhythm review with EKG rhythm identification test for assessment of skills.

http://www.skillstat.com/Flash/ECGSim531.html

Cardiac Case Studies

Over 40 cardiac cases that contain links that access 12 lead ECG's and a cath film. http://sprojects.mmi.mcgill.ca/heart/ecghome.html

Cardiac Electrocardiograms

ECG library that contains rhythm strips with interpretations http://www.ecglibrary.com/

ECG Learning Center Tutorial – University of Utah. Contains both beginning and advanced information on ECG interpretation.

http://library.med.utah.edu/kw/ecg/

12 Lead ECG Interpretation. Includes quizzes, flashcards to use for further study and practice ECG interpretation.

www.12leadecg.com/intro/

University of Wisconsin. Site contains educational video on 12-lead ECG interpretation.

http://www.fammed.wisc.edu/our-department/media/614/ecg-course-1

Arterial Blood Gas

Arterial Blood Gas Interpretation.

Self-learning module for interpretation of arterial blood gases.

 $\underline{http://orlandohealth.com/pdf\%20folder/Inter\%20of\%20Arterial\%20Blood\%20Gas}.\underline{pdf}$

ABG Self-Learning Module

Provides an overview of ABG interpretation. Case studies are included at the end for further evaluation of skills.

http://www.scribd.com/doc/9329596/abg-interpretation

Bioterrorism/Disaster Preparedness

World Health Organization

http://www.who.int/topics/disasters/en/

Society of Critical Care Medicine Disaster Resources

http://www.sccm.org/Public_Health_and_Policy/Disaster_Resources/Pages/default.aspx

Centers for Disease Control and Prevention

Home page for emergency preparedness and response. Gives links for bioterrorism, chemical emergencies, radiation emergencies, mass casualties, natural disasters and severe weather, and recent outbreaks and incidents. http://www.bt.cdc.gov/

Federal Emergency Medicine Association

Provides a number of interactive web courses related to disaster management. http://training.fema.gov/

Cardiovascular

Advanced Cardiac Life Support

SkillsStat Self Testing and Assessment of ACLS algorithms and medications. http://www.skillstat.com/Flash/ACLS_Stat531.html

Cardiac Auscultation

Gives audible heart and lung sounds to help increase ausculatation skills. http://www.wilkes.med.ucla.edu/intro.html

Cardiologysite.com. Site includes instructional movies, 3-D animation of the heart, interactive heart sounds and murmurs, echocardiograms, introduction to coronary angioplasty.

http://www.cardiologysite.com

University of Florida- Vascular Biology Working Group

Site offers multiple continuing education modules related to cardiovascular diseases and treatments.

http://www.vbwg.org/meeting_highlights.cfm

Baylor College of Medicine

Lipids online provides a slide library and educational modules related to topics in atherosclerosis, dyslipidemia and lipid management. http://www.lipidsonline.org

Baylor College of Medicine

Hypertension online provides educational modules on topics related to hypertension. http://www.hypertensiononline.org/home/about HOL.cfm

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Cardiovillage

Sponsored by the University of Virginia Health System, provides access to online learning content in cardiology.

http://www.cardiovillage.com

Cardiac Trivia Challenge

SkillsStat Self Testing and Assessment. Cardiac trivia question presented in a game setting. http://www.skillstat.com/Flash/cardiacTrivia5_531.html

Cardiologysite.com Site includes instructional movies, 3-D animation of the heart, interactive heart sounds and murmurs, echocardiograms, introduction to coronary angioplasty. http://www.cardiologysite.com

Cardiac Dictionary

SkillsStat Self Testing and Assessment. Simplistic alphabetical listing of heart terminology and definitions.

http://www.skillstat.com/Flash/cardiacDictionary531.html

SCCM's Cardiac Knowledge Line

Includes webcasts, podcasts and other information on Hemodynamic Monitoring, Arrhythmias, CPR, Heart failure

http://www.learnicu.org/Clinical_Practice/Systems/Cardiac/Pages/default.aspx

Delirium

ICU Delirium

Website offers education and resources related to the monitoring and treatment of delirium for ICU patients and patient-oriented goal-directed sedation delivery. Sponsored by The Delirium and Cognitive Impairment Study Group, Vanderbilt University Medical Center Geriatric Research Education Clinical Center, United States Department of Veterans Affairs, and Vanderbilt School of Medicine www.icudelirium.org/

ICUSteps

A family and patient website established in the United Kingdom that offers resources for patients and family members who have experienced an ICU stay which has involved an experience of delirium. The site offers an ICU guide for patients and families, among other resources www.icusteps.com

End of Life and Palliative Care

PEP-C (Palliative Care Education Program - Calgary) online is an accessible, self-directed, web based education program on a variety of topics in palliative care. http://www.seniorshealthandpalliativecareeducationcalgary.com/ **Needs account and password (or enrollment key)**

End of Life/Palliative Education Resource Center

Provides a variety of case studies and web based training modules related to palliative care http://www.eperc.mcw.edu/EPERC/EducationalMaterials

Center for Palliative Care Education – University of Washington

Provides a variety of website links and resources http://depts.washington.edu/pallcare/links/list.php

Center to Advance Palliative Care

Improving Palliative Care in the ICU Resources website – povides a variety of templates, toolkits and resources to facilitate ICU palliative care improvement. http://www.capc.org/ipal-icu/

SCCM's End of Life Knowledge Line

Includes webcasts, podcasts and other information on end of life issues (Beginner and Advanced)

http://www.learnicu.org/Clinical_Practice/Systems/End_of_Life/Pages/default.aspx

Gastroenterology

The DAVE Project, an acronym for the Digital Atlas of Video Education, is a collection of teaching tools. The project consists of a gastrointestinal endoscopy video atlas and medical lectures and presentations.

http://daveproject.org/index.cfm

General Critical Care Medicine

Critical Care A Day

Provides critical care pearls, Calculators/Formulae, procedural videos, a database of critical care related articles and protocols and other resources http://www.icuroom.net

Medscape Critical Care CME

Provides a variety of topics and case reviews related to critical care medicine http://cme.medscape.com/criticalcare

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Critical Care Medicine Tutorials

Developed to assist medical residents during their critical care rotation in the surgical ICU at the University of Pennsylvania provides instructional content and case studies on respiratory failure, shock, renal failure and sepsis.

http://www.ccmtutorials.com/

Society of Critical Care Medicine

Contains links to guidelines and recommendations regarding various critical care topics such as management of corticosteroid insufficiency, sepsis, hemodynamic support, etc. http://www.learnicu.org/Quick_Links/Pages/default.aspx

The Merck Manuals Online Medical Library

This site contains links to information on treating critically ill patients including information on vascular access, respiratory and cardiac arrest, mechanical ventilation, etc. http://www.merck.com/mmpe/sec06.html

Hemodynamic Monitoring

Pulmonary Artery Catheter Education Program (PACEP) provides educational modules on the use of pulmonary artery catheters by presenting novice to expert instructional material along with challenging case studies for further learning. http://www.pacep.org

Infectious Disease/Antibiotics

University of Washington School of Public Health

Offers 3 infectious disease modules. The first module focuses on emergence of infectious disease and includes lectures on influenza and Tb. The second module focuses on current challenges in infectious diseases and includes lectures on HIV/AIDS and West Nile Virus. The third module focuses on public health response and vaccine development.

http://depts.washington.edu/eminf/2004/lectures.htm

Centers for Disease Control and Prevention

Power point slides to educate health care providers about drug resistance and the ways in which we can prevent antimicrobial resistance from occurring.

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www.cdc.gov/DRUGRESISTANCE/healthcare/ha/HASlideSet_clean.ppt

John Hopkins Antibiotic guide allows the practitioner to search information by diagnosis, pathogen, or antibiotic type. Infectious disease considerations and recommendations are given where appropriate for diagnosis or pathogen. (Available to download to palm.).

http://www.hopkins-abxguide.org/

SCCM's Infection Knowledge Line

Includes webcasts, podcasts and other information on Nosocomial, Sepsis, Infection Control and Disease

http://www.learnicu.org/Clinical_Practice/Systems/Infection/Pages/default.aspx

Laboratory Tests

Labtestsonline. Searchable lat test site for specific tests, conditions/diseases, or screenings. Each topic is explained in simple terms and is correlated to a specific laboratory test. http://www.labtestsonline.org

Neurology/Neurosurgery

National Institute of Neurologic Disorders and Stroke. Site contains index of multiple neurologic disorders and videos on neurologic topics http://www.ninds.nih.gov/disorders/disorder index.htm

The Spine Center. Site contains educational videos on conditions of the spine, surgical and nonsurgical spinal procedures.

http://www.spinecenterofdupage.com/video5-spine-procedures.html

Foundation for Education and Research in Neurologic Emergencies. Site contains videos on the a variety of neurological topics. Contains intracerebral hemorrhage and hypertensive emergency CME training modules. http://www.ferne.org/

Neuroland.com General Web Reference for multiple neurologic disorders with multiple links and references.

http://www.neuroland.com

Christopher Reeves Spinal Cord Injury Resource Center. Discusses the basics of spinal cord injury and the possible sequelae related to the level of injury.

http://www.spinalinjury.net/

Stroke Center – Resource on Strokes, visit Stroke Information for Health Care Professionals review anatomy and physiology, great diagnostic imaging section. http://www.strokecenter.org/prof/

SCCM's Neurology Knowledge Line

Includes webcasts, podcasts and other information on Head Injury, Sedation and Delirium, Stroke, Depression (Beginner and Advanced) http://www.learnicu.org/Clinical_Practice/Systems/Neurology/Pages/default.aspx

Nutrition in the Critically Ill

Critical Care Nutrition provides information on current research being performed in critical care nutrition as well as current guidelines for enteral v. parenteral feeding in the critically ill adult.

www.criticalcarenutrition.com

Continuing Education in Nutrition Life Long Learning Program

In-depth nutritional education program focusing on the changing metabolic needs of the critically ill adult.

http://lllnutrition.com/login/signup.php

SCCM's Nutrition Knowledge Line

Includes webcasts, podcasts and other information on nutrition http://www.learnicu.org/Clinical_Practice/Systems/Nutrition/Pages/default.aspx

Pharmacology

Critical Care London

Critical care self-directed learning modules on analgesia, sedation and delirium. http://www.lhsc.on.ca/critcare/icu/drugs/drugindex.html

Critical Care Medicine Tutorials. Tutorials on anesthesia, critical care medicine, pain management, regional anesthesia, and internal medicine. http://www.ccmtutorials.com/

Pain Management – the online series – 12 pain management online modules. Provides in-depth information on pain from the pathophysiology of different types of pain to the assessment of the patient and evaluation of pain.

American Medical Association

http://www.ama-cmeonline.com/pain_mgmt/

Kaiser Permanente

On-line web video presenting information on advanced critical care (inotropes, vasopressors, sedatives, opioids, and analgesics).

http://nursingpathways.kp.org/national/learning/webvideo/programs/accc2_therape_utics/index.html#speaker

Physical Assessment

Presents basic heart sounds and lung sounds audibly.

http://www.stethographics.com/main/physiology_ls_introduction.html

University of Washington Department of Medicine

Advanced physical diagnosis website. Contains heart tones and murmurs and tips for examining the heart, lungs, liver, and thyroid.

http://depts.washington.edu/physdx/heart/index.html

University of Florida. Physical exam study guides for each body system. Contains information on normal and abnormal findings.

http://medinfo.ufl.edu/year1/bcs/clist/

Pulmonary

The Auscultation Assistant. Gives audible auscultation sounds of the normal lung, crackles, and wheezes.

http://www.wilkes.med.ucla.edu/lungintro.htm

California Society of Anesthesiologists

Ventilator Associated Pneumonia CME module.

http://www.csahq.org/pdf/bulletin/crit_care_mod_57_3.pdf

Kaiser Permanente

On-line web video presenting information on advanced critical care (ventilator modes, use of PEEP, ABGs, and management of the patient with ARDS).

http://nursingpathways.kp.org/national/learning/webvideo/programs/accc3_resp/index.html

Radiology

Learningradiology.com Provides lectures on multiple different chest topics including aspiration pneumonia, pleural effusion, pneumonia. Also provides links to view chest x-rays of multiple topics.

http://www.learningradiology.com

Harvard Med School Chest Radiology: Contains a brief introduction to x-ray interpretation along with 11 case studies for specific conditions. http://brighamrad.harvard.edu/education/online/clerk_2/read.html

Radiology Case Museum - A database of radiology examples http://myweb.lsbu.ac.uk/dirt/museum/museum.html

Chorus Hypertext of Radiology

Contains various diagnostic testing images for multiple conditions. Conditions are divided under system headings (i.e. cardiovascular, nervous system, etc). Must be a member of BMJ to visualize large versions of the diagnostic testing images. http://chorus.rad.mcw.edu/

Goldminer is a search engine that understands medical terminology and has access to over 200,000 radiologic images published in peer-reviewed journals. http://goldminer.arrs.org/

Chestx-ray.com This site contains multiple lectures on a variety of topics pertaining to thoracic imaging. The ABC's of blunt force trauma is an especially good lecture that helps the practitioner focus on specific common diagnoses after such things as a car accident.

http://www.chestx-ray.com/Education/Education.html

Tutorial: CT in head trauma

This site includes multiple types of head traumas and accompanying CT scans including subdural hematomas, subarachnoid hematomas, intracranial air, etc. http://www.radiology.co.uk/srs-x/tutors/cttrauma/tutor.htm

University of Virginia (UV) Radiology Reviews Series Introduction to Head CT

Reviews cranial anatomy, topics of trauma, stroke, degenerative diseases, infection, and tumor. All topics are accompanied with actual CT scan results to help the learner visualize the changes.

http://www.med-ed.virginia.edu/courses/rad/headct/

UV Interpretation of the ICU chest Film

Includes films of post-op CABG patients, how to identify NG tube placement, IABP placement, swan-ganz catheter placement, etc. http://www.med-ed.virginia.edu/courses/rad/chest/

UV Cervical Spine Imaging

Discusses the use of x-rays in the diagnosis of cervical spine injury. In-depth discussion of different views used in order to make accurate diagnoses.

http://www.med-ed.virginia.edu/courses/rad/cspine/index.html

UV Skeletal Trauma

Provides an introduction to diagnosing skeletal trauma by x-ray. http://www.med-ed.virginia.edu/courses/rad/ext/index.html

Vesalius Clinical Folios

Addresses a wide variety of topics related to each body system. http://www.vesalius.com/cfoli.asp

Organ System Modules

University Hospital of Cleveland site contains links to multiple radiology case studies. Each case study includes the accompanying radiologic testing pictures. Imaging that is addressed on this site include womens' imaging, neuro imaging, musculoskeletal imaging, Nuclear & SPECT imaging, PET scan, and body imaging. (Advanced) www.Uhrad.com

Renal Failure

Critical Care Medicine Tutorials- Home page contains a link to a tutorial on renal pathophysiology, oliguria, renal replacement therapies, and acid-base balance. http://www.ccmtutorials.com/

SCCM's Renal Knowledge Line

Includes webcasts, podcasts and other information on renal topics http://www.learnicu.org/Clinical_Practice/Systems/Renal/Pages/default.aspx

Sepsis

Surviving Sepsis Campaign

An initiative of the Society of Critical Care Medicine and the European Society of Intensive Care Medicine developed to improve the management, diagnosis, and treatment of sepsis

http://www.survivingsepsis.org/Pages/default.aspx

Medscape

Sepsis associated shock, management of ARDS, and mechanical ventilatory strategies. http://www.medscape.com/viewarticle/452476_4

Society of Critical Care Medicine

Contains links to guidelines and recommendations regarding various critical care topics such as management of corticosteroid insufficiency, sepsis, hemodynamic support, etc. http://www.learnicu.org/Quick Links/Pages/default.aspx

Therapeutic Hypothermia

SCCM's Hypothermia Knowledge Line

Includes webcasts, podcasts and other information on therapeutic hypothermia http://www.learnicu.org/Clinical_Practice/Systems/Therapeutic-Hypothermia/Pages/HypothermiaPresentations.aspx

Trauma

Trauma.org

Provides a databank of images, case discussions and articles that are useful references for trauma related topics.

http://www.trauma.org/resus/teamleader/teamleader.html

Trauma Brain Injury Foundation

Provides guidelines for EMS and hospital management of patients with traumatic brain injury. http://www.braintrauma.org

John C Lincoln Hospitals. Site contains extensive trauma-related education for medical professionals.

http://www.jcl.com/content/trauma/professional_education.html

University of Connecticut

This is a video tutorial on the examination and management of the trauma patient. http://www.conntutorials.com/chapter2.html

Center for Disease Control. Navigate to the link labeled Public Health Professionals and Clinicians. Contains information on what to do after terrorist bombing, blast injury fact sheet, mass brain injury, etc.

http://www.bt.cdc.gov/masscasualties/resources.asp

World Health Organization's guidelines for essential trauma care.

http://www.who.int/violence_injury_prevention/publications/services/guidelines_traumac fare/en/index.html

General Educational Sites

Morbidity and Mortality Rounds on the Web

Agency for Healthcare Research and Quality – covers a variety of clinical topics, patient safety issues, patient care issues with monthly topic discussions (Beginner and Advanced)

http://webmm.ahrq.gov/

Clinical Cases and Images-Blog

A comprehensive site for clinical cases and images http://casesblog.blogspot.com/2002/01/about-us.html

Pathology at Pathology.org. Site contains educational videos on the pathology related topics

http://pathlab.org/FNA_Cytology_Technique_Pathlab.org_Pathology_UK_Video_C vtology_Books_Media_News.html

MedicalRounds.com. Site offers online continuing medical education for health care providers through streaming video of medical rounds. http://www.medicalrounds.com

Vesalius Clinical Folios

Addresses a wide variety of topics related to each body system. Site is easy to navigate and contains pictoral demonstrations of chest tube placement. Site also reviews abdominal CT scan interpretation.

http://www.vesalius.com/cfoli.asp

Baylor College of Medicine's continuing education website

(http://www.baylorcme.org/specialty.cfm?menu_id=38) also offers continuing education on a variety of clinical topics

Cleveland Clinic

Continuing education modules. Includes modules on AMI, thrombophlebitis, pancreatitis, fatty liver, thrombocytopenia, CAP, and others http://www.clevelandclinicmeded.com/online/casebased/decisionmaking/

Northwestern University Center for Genetic Medicine. Site contains video lectures on genetics, primarily for healthcare professionals. http://www.feinberg.northwestern.edu/education/

University of Wisconsin-Madison. Innovation in Medical Education Video Library. Site contains educational videos on numerous topics for the healthcare professional. Free registration.

http://videos.med.wisc.edu/category.php?categoryid=31

University of California Television. Site contains educational videos for faculty, students, staff, patients and others on multiple current healthcare topics. http://www.uctv.tv/meded/