

**Clin-eguide™**  
*The single source for clinical decision support.*

**Release Notes**  
version 3.3.5



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## McKesson Patient Handouts

RelayHealth (part of McKesson) has improved the Clinical Reference System (CRS) Patient Education system to help you find the education topics you want for your patients: faster, simpler, and more intuitively. RelayHealth is also pleased to announce the system's new and easy-to-remember name: RelayClinical™ Patient Education.

This update consolidates all eight advisors, currently grouped by specialty focus, into just two age specific advisors:

- Pediatric topics
- Adult topics

In this update, you receive more educational topics than before, while finding a topic continues to be as simple as doing a keyword search.

RelayClinical™ Patient Education is still your trusted provider of educational topics that are easy-to-read and help your patients understand important information that impacts their health. The product provides the professionally written, physician-reviewed patient education information that you have come to trust.

## Clin-eguide Evidence-based Medicine Guidelines

In this update, the Clin-eguide Evidence-based Medicine Guidelines reflect the following evidence updates:

### Acute interstitial nephritis

Early steroid treatment (within 7 days of drug withdrawal) is associated with improved recovery of renal function in drug-induced acute interstitial nephritis.

Reference: Early steroid treatment improves the recovery of renal function in patients with drug-induced acute interstitial nephritis. *Kidney International* 2008; 73: 940-946

### Acute pericarditis

Use of colchicine at some stage in the initial or recurrent treatment of acute idiopathic pericarditis is recommended in recent expert reviews.

References: Imazio M, Brucato A, Mayosi BM, et al. Medical therapy of pericardial diseases: part I: idiopathic and infectious pericarditis. *Journal of Cardiovascular Medicine* 2010;11(10):712-22; Khandaker MH, Espinosa RE, Nishimura RA, et al. Pericardial disease: diagnosis and management. *Mayo Clinic Proceedings* 2010;85(6):572-93

### Appendicitis

Start antibiotics as soon as the diagnosis of appendicitis is made or for suspected appendicitis where diagnostic imaging studies are equivocal.

Use antibiotics that are effective against facultative and aerobic gram-negative organisms and anaerobic organisms.

Reference: Solomkin JS, Mazuski JE, Bradley JS, et al. Diagnosis and management of complicated intra-abdominal infection in adults and children: guidelines by the Surgical Infection Society and the Infectious Diseases Society of America. *Surgical Infections* 2010;11(1):79-109

## Approach to pleural effusion

The British Thoracic Society recommends that instillation of a pleural sclerosant via intercostal tube or thoracoscopically is considered for symptomatic malignant pleural effusions in patients who are likely to respond and have a life expectancy of >2-3 months

The British Thoracic Society 2010 guidelines cover the investigation of patients with unilateral pleural effusions, malignant pleural effusion, pleural infection, pleural procedures and thoracic ultrasound. These are currently the most up-to-date evidence-based guidelines available.

Reference: Roberts ME, Neville E, Berrisford RG, et al, BTS Pleural Disease Guideline Group. Management of a malignant pleural effusion: British Thoracic Society Pleural Disease Guideline 2010. *Thorax* 2010;65 2:ii32-ii40

## Aspergillosis, HIV-associated

Galactomannan antigen has been successfully detected in CSF and bronchoalveolar lavage fluid, however, the Infectious Diseases Society of America considers its use as a diagnostic and therapeutic monitoring tool investigational. Recommended for screening for invasive aspergillosis, primarily in stem-cell transplant patients, however, it is not recommended for use in children.

Reference: Leeflang MM, Debets-Ossenkopp YJ, Visser CE, et al. Galactomannan detection for invasive aspergillosis in immunocompromized patients. *Cochrane Database of Systematic Reviews* 2008;4

## Bartonellosis, HIV-associated

New adult and pediatric guidelines on opportunistic infections have been released to update management of bartonellosis in HIV-infected individuals. Guidelines remain largely unchanged from working group guidelines on opportunistic infections published in 2008.

References: Mofenson LM, Brady MT, Danner Sp, et al, Centers for Disease Control and Prevention, National Institutes of Health, HIV Medicine Association of the Infectious Diseases Society of America, Pediatric Infectious Diseases Society, American Academy of Pediatrics. Guidelines for prevention and treatment of opportunistic infections among HIV-exposed and HIV-infected children. 2009. Available from: [http://aidsinfo.nih.gov/contentfiles/Pediatric\\_OI.pdf](http://aidsinfo.nih.gov/contentfiles/Pediatric_OI.pdf) [Accessed: April 1, 2011]; Kaplan JE, Benson C, Holmes KH, et al, Centers for Disease Control and Prevention, National Institutes of Health, HIV Medicine Association of the Infectious Diseases Society of America. Guidelines for prevention and treatment of opportunistic infections in HIV-infected adults and adolescents. 2009. Available from: [http://aidsinfo.nih.gov/contentfiles/Adult\\_OI.pdf](http://aidsinfo.nih.gov/contentfiles/Adult_OI.pdf) [Accessed: April 1, 2011]

## Bronchiolitis

There continues to be wide variation in treatment for bronchiolitis with supportive therapy predominating. Modified recommendations for the use of palivizumab for prevention of respiratory syncytial virus infections were released in 2009 from the American Academy of Pediatrics Committee on Infectious Diseases and are reflected in the 2010 release. New palivizumab recommendations define risk factors for infants with a gestational age between 32 weeks 0 days and 34 weeks 6 days (formerly 32 weeks 1 day through 35 weeks 0 days) to include:

- Attending child care or
- Having one or more siblings or other children  $\leq$ 5 years living in the household.

Infants of the defined gestational age born within 3 months before the start of RSV season or at any time throughout the RSV season who have one of these two risk factors qualify for prophylaxis. Previous recommendations called for meeting two out of five risk factors.

Prophylaxis is given only until the infants reaches 90 days of age or a maximum of three doses, whichever comes first. Former recommendations called for 5 months of prophylaxis.

Reference: Committee on Infectious Diseases. From the American Academy of Pediatrics: Policy statements--Modified recommendations for use of palivizumab for prevention of respiratory syncytial virus infections. *Pediatrics* 2009;124(6):1694-701

## Cardiogenic shock

A 2010 multicenter RCT published subsequent to the guidelines showed dopamine was associated with an increased mortality rate at 28 days compared to norepinephrine when used in the sub-group of patients with cardiogenic shock (P=0.03) however, this was not seen in hypovolemic or septic shock.

Reference: De Backer D, Biston P, Devriendt J, et al, SOAP II Investigators. Comparison of dopamine and norepinephrine in the treatment of shock. *New England Journal of Medicine* 2010;362(9):779-89

## Catheter-associated urinary tract infection

Specific definitions of catheter-associated UTI vary depending on source of the guidelines (eg, IDSA or CDC/NHSN).

Asymptomatic bacteriuria should not be treated because it may not be eradicated, may recur, and may lead to selection of resistant organisms.

Reference: Gould CV, Umscheid CA, Agarwal RK, et al, Healthcare Infection Control Practices Advisory Committee. Guideline for prevention of catheter-associated urinary tract infections 2009. *Infection Control & Hospital Epidemiology* 2010;31(4):319-26; Hooton TM, Bradley SF, Cardenas DD, et al, Infectious Diseases Society of America. Diagnosis, prevention, and treatment of catheter-associated urinary tract infection in adults: 2009 International Clinical Practice Guidelines from the Infectious Diseases Society of America. *Clinical Infectious Diseases* 2010;50(5):625-63

## Chlamydia

Nucleic acid amplification tests (NAATs) are now the recommended tests for the detection of reproductive tract infections caused by *C. trachomatis* and *N. gonorrhoeae* infections in both women and men, with and without symptoms.

Reference: Association of Public Laboratories, Centers for Disease Control and Prevention. Laboratory diagnostic testing for Chlamydia trachomatis and Neisseria gonorrhoeae. Expert consultation meeting summary report. Atlanta, GA, 2009. Available from URL: <http://www.cdc.gov/od/oc/media/pressrels/r090401.htm> [Accessed: April 1, 2011]

## Cholelithiasis

A randomized trial of 70 patients receiving single incision laparoscopic cholecystectomy (SILC) or mini laparoscopic cholecystectomy (MLC) revealed SILC to be superior relative to cosmetic outcome but not in postoperative pain or requirements for analgesics.

In one population-based cohort study that included 10,927 elective cholecystectomy procedures, no improvement in postoperative infectious complications was observed when patients were given antibiotic prophylaxis.

References: Lee PC, Lo C, Lai PS, et al. Randomized clinical trial of single-incision laparoscopic cholecystectomy versus minilaparoscopic cholecystectomy. *British Journal of Surgery* 2010;97(7):1007-12; Lundstrom P, Sandblom G, Osterberg J, et al. Effectiveness of prophylactic antibiotics in a population-based cohort of patients undergoing planned cholecystectomy. *Journal of Gastrointestinal Surgery* 2010;14(2):329-34

## Chronic lymphocytic leukemia

The identification of several markers of prognostic significance has helped to tailor the treatment of CLL and increase the rates of clinical remission and treatment-free survival. Clinical trials are ongoing to identify patients who may benefit from early adequate treatment, and to achieve eradication of minimally residual disease.

Reference: Van Bockstaele F, Verhasselt B, Philippe J. Prognostic markers in chronic lymphocytic leukemia: a comprehensive review. *Blood Reviews* 2009;23(1):25-47. Foon KA, Hallek MJ. Changing paradigms in the treatment of chronic lymphocytic leukemia. *Leukemia* 2010;24(3):500-11

## Chronic myelogenous leukemia

Nilotinib at a dose of either 300mg or 400mg twice daily was superior to imatinib in patients with newly-diagnosed chronic-phase CML.

Reference: Saglio G, Kim DW, Issaragrisil S, et al, ENESTnd Investigators. Nilotinib versus imatinib for newly diagnosed chronic myeloid leukemia. *New England Journal of Medicine* 2010; 362(24):2251-9

## Crohn's disease

In the past 5 years, tumor necrosis factor-alpha antagonist therapy has become a cornerstone in the management of moderate to severe Crohn's disease refractory to conventional treatment algorithms. Consideration of such treatment is especially indicated in patients who have continuing moderate to severe symptoms in spite of conventional therapy with immunomodulators and/or corticosteroids (are steroid-refractory), are steroid-dependent, corticosteroids are contraindicated in or not desired, have clinical features that suggest a poor prognosis, relapse early (< 3months) with moderate or severe symptoms, or are hospitalized and rapid onset of action is desired.

References: Canadian Association of Gastroenterology Clinical Practice Guidelines: The use of tumour necrosis factor-alpha antagonist therapy in Crohn's disease. *Canadian J Gastroenterology* 2009;23:185-202; Dignass A, Van Assche G, Lindsay JO, et al. The second European evidence-based consensus on the diagnosis and management of Crohn's disease: current management. *The European Crohn's and Colitis Organization, Journal of Crohn's & colitis* 2010;4:28-62

## Cystic fibrosis

Exploiting knowledge of the molecular basis for CF, a new drug, VX-770, a "CFTR potentiator," improves flow of ions through activated CFTR-mutant G551D; VX-770 is the first clinically tested (phase 2 trial) treatment for CF aimed directly at ameliorating CFTR performance, demonstrating *in vivo* improved electrophysiological and pulmonary function tests in CF patients.

Reference: Effect of VX-770 in persons with cystic fibrosis and the B551D-CFTR mutation. Accurso FJ, Rowe SM, Clancy JP, et al. *New England Journal of Medicine* 2010;363(21):1991-2003

## Depression

Meta-analysis of 4 RCTs in patients with depression and coronary artery disease found treatment with antidepressants resulted in a significant improvement in depression scores over placebo and no significant difference in overall drop-outs or drop-outs due to adverse effects.

Reference: Dowlait Y, Herrmann N, Swardfager WL, et al. Efficacy and tolerability of antidepressants for treatment of depression in coronary artery disease: a meta-analysis. *Canadian Journal of Psychiatry* 2010; 55(2): 91-9

## Dyslipidemia

In highest- and high-risk patients (10-year risk for MI or CAD death >20%), the target LDL-C goal is <70 mg/dL or 100 mg/dL, respectively, according to major 2008 guidelines.

Reference: Adams RJ, Albers G, Alberts MJ, et al, American Heart Association, American Stroke Association. Update to the AHA/ASA recommendations for the prevention of stroke in patients with stroke and transient ischemic attack. *Stroke* 2008;39(5):1647-52; Brunzell JD, Davidson M, Furberg CD, et al, American Diabetes Association, American College of Cardiology Foundation. Lipoprotein management in patients with cardiometabolic risk: consensus statement from the American Diabetes Association and the American College of Cardiology Foundation. *Diabetes Care* 2008;31(4):811-22

## Genital herpes

Routine administration of acyclovir to pregnant women who have a history of recurrent genital herpes is still not recommended, and is further supported by a Cochrane Review.

- Meta-analyses of RCTs in the review suggest that acyclovir treatment near term demonstrates:
  - insufficient evidence on the incidence of neonatal herpes
  - limited information on neonatal safety of prophylaxis
  - a reduced rate of cesarean deliveries in women who have frequently recurring or newly acquired genital herpes (relative risk 0.30; 95%CI, 0.20-0.45)
  - that women were significantly less likely to have HSV detected at delivery (relative risk 0.14; 95%CI, 0.05-0.39).

References: Workowski KA, Berman S. Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2010. *Morbidity & Mortality Weekly Report (MMWR)* 2010;59(RR-12):1-110; Hollier LM, Wendel GD. Third trimester antiviral prophylaxis for preventing maternal genital herpes simplex virus (HSV) recurrences and neonatal infection. *Cochrane Database of Systematic Reviews* 2008;1

## Hepatitis A

Hepatitis A virus (HAV) vaccine is recommended as part of the routine vaccine schedule in the US.

Persons with recent exposure to HAV, who have not received hepatitis A vaccine should receive the vaccine or immunoglobulin; those traveling to or working in countries of high or intermediate HAV endemicity should be vaccinated or receive IG before departure.

Previously unvaccinated persons who will have close contact with international adoptees from countries of high or intermediate endemicity should receive hepatitis A vaccine in the first 60 days after arrival of adoptees.

References: Fiore AE, Wasley A, Bell BP. Advisory Committee on Immunization Practices (ACIP). Prevention of hepatitis A through active or passive immunization: recommendations of the ACIP. *Morbidity & Mortality Weekly Report. Recommendations & Reports* 2006; 55(RR-7):1-23; Committee on Immunization Practices (ACIP), Centers for Disease Control and Prevention (CDC). Update: Prevention of hepatitis A after exposure to hepatitis A virus and in international travelers. Updated recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR - Morbidity & Mortality Weekly Report* 2007;56(41):1080-84; Centers for Disease Control and Prevention (CDC), Advisory Committee on Immunization Practices. Updated recommendations from the Advisory Committee on Immunization Practices (ACIP) for use of hepatitis A vaccine in close contacts of newly arriving international adoptees. *MMWR - Morbidity & Mortality Weekly Report* 2009;58(36):1006-7

## Hepatitis B

The recommendation for first-line oral antiviral medications has been changed to tenofovir or entecavir, and adefovir has been moved to second-line oral antiviral medication. Interferon remains one of the first-line options for patients who do not have cirrhosis.

Reference: Lok AS, McMahon BJ. Chronic hepatitis B: update 2009. *Hepatology* 2009; 50(3):661-2

## Hepatitis C

Qualitative HCV RNA assays are no longer required, owing to the availability of real-time polymerase chain reaction-based assays, and transcription-mediated amplification (TMA) assays, with sensitivities of 10-50 IU/mL. Highly sensitive assays with this lower limit of detection are appropriate for monitoring during therapy.

Reference: Ghany MG, Strader DB, Thomas DL, Seeff L. American Association for the Study of Liver Diseases. Diagnosis, management, and treatment of hepatitis C: an update. *Hepatology* 2009;49(4):1335-74

## **Histoplasmosis, HIV-associated**

In studies of patients with all stages of HIV disease, mortality of patients treated by clinicians or hospitals experienced in HIV management was significantly lower than in patients treated by less experienced clinicians.

A subsequent study comparing care provided by hospitalists and nonhospitalists (other types of specialists) indicated that HIV specialty care experience was not associated with any improved process of care or outcome.

However, referral to specialist care is still advised.

References: Schneider JA, Zhang Q, Auerbach A, et al. Do hospitalists or physicians with greater inpatient HIV experience improve HIV care in the era of highly active antiretroviral therapy? Results from a multicenter trial of academic hospitalists. *Clinical Infectious Diseases* 2008;46(7):1085-92; Kitahata MM, Koepsell TD, Deyo RA, et al. Physicians' experience with the acquired immunodeficiency syndrome as a factor in patients' survival. *New England Journal of Medicine* 1996;334(11):701-6; Stone VE, Seage GR 3rd, Hertz T, Epstein AM. The relation between hospital experience and mortality for patients with AIDS. *JAMA* 1992;268(19):2655-61; Turner BJ, Ball JK. Variations in inpatient mortality for AIDS in a national sample of hospitals. *Journal of Acquired Immune Deficiency Syndromes* 1992;5(10):978-8

## **HIV-associated- candidiasis, coccidioidomycosis**

The American Thoracic Society has released an official statement on the management of adult pulmonary and critical care patients with fungal infections in 2011. Although there are no specific therapy recommendations for patients with HIV infection, the guideline contain information on antifungal therapy for candidemia.

Because there is the potential for drug interactions with antiretroviral agents when treating infections in patients with HIV/AIDS, these interactions are outlined in detail in the Antiretroviral Guidelines for Adults and Adolescents convened by the US Department of Health and Human Services panel.

References: Limper AH, Knox KS, Sarosi GA. An official American Thoracic Society statement: treatment of fungal infections in adult pulmonary and critical care patients. *American Journal of Respiratory & Critical Care Medicine* 2011;183(1):96-128; Panel on Antiretroviral Therapy and Medical Management of HIV-Infected Children. Guidelines for the use of antiretroviral agents in pediatric HIV infection. Rockville, MD, 2010:1-219; Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Rockville, MD: Department of Health and Human Services, 2011:1-166

## **HIV-associated cryptococcosis**

Cryptococcal immune reconstitution inflammatory syndrome (IRIS) has been described in association with initiation of antiretroviral therapy (ART) and may occur in up to 30% of patients with cryptococcal meningitis. Initiation of ART should be delayed until 2-10 weeks after initiating antifungal induction therapy to avoid IRIS.

References: Kaplan JE, Benson C, Holmes KH, et al, Centers for Disease Control and Prevention, National Institutes of Health, HIV Medicine Association of the Infectious Diseases Society of America. Guidelines for prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: recommendations from CDC, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. *Morbidity & Mortality Weekly Report. Recommendations & Reports* 2009;58(RR-4):1-207; Limper AH, Knox KS, Sarosi GA. An official American Thoracic Society statement: treatment of fungal infections in adult pulmonary and critical care patients. *American Journal of Respiratory & Critical Care Medicine* 2011;183(1):96-128; Perfect JR, Dismukes WE, Dromer F, et al. Clinical practice guidelines for the management of cryptococcal disease: 2010 update by the Infectious Diseases Society of America. *Clinical Infectious Diseases* 2010;50(3):291-322

## **HIV associated cytomegalovirus infection**

CMV viremia is associated with increased risk of CMV-end organ disease, HIV progression and death.

Reference: El Amari EB, Combescure C, Yerly S, et al, Swiss Cohort Study. Clinical relevance of cytomegalovirus viraemia [published online ahead of print Jan 19,2011]. *HIV Medicine* 2011;12(doi: 10.1111/j.1468-1293.2010.00900.x)

## Ischemic stroke

- For patients with metabolic syndrome:
  - treat individual syndrome components that are also stroke risk factors, especially hypertension and dyslipidemia
  - counsel on diet, exercise, and weight loss as components of risk factor reduction
  - usefulness of screening for metabolic syndrome has not yet been determined.

Reference: Furie KL, Kasner SE, Adams RJ, et al, American Heart Association Stroke Council, Council on Cardiovascular Nursing, Council on Clinical Cardiology, Interdisciplinary Council on Quality Care and Outcomes Research. Guidelines for the Prevention of Stroke in Patients With Stroke or Transient Ischemic Attack: a Guideline for Healthcare Professionals From the American Heart Association/American Stroke Association. *Stroke* 2011;42(1):227-276

## Mononucleosis, infectious

The American Association of Clinical Chemists and Centers for Disease Control and Prevention have recommended against using the point-of-care heterophile antibody agglutination (HLA) test for EBV for children under the age of 13 and 10, respectively. False negative results are more common in this age group than previously thought, resulting in a sensitivity for the HLA test of between 15-33%.

References: Campbell S, Campos J, Hall GS, et al. Infectious disease. In: Nichols, JH editor. Evidence-based practice for point-of-care testing. Springfield, MA: American Association for Clinical Chemistry, Inc., 2006. Available from URL: <http://www.aacc.org/SiteCollectionDocuments/NACB/LMPG/POCTLMPG.pdf#page=92> [Accessed: April 1, 2011]; National Center for Infectious Disease. Epstein-Barr virus and infectious mononucleosis. Atlanta, GA: Centers for Disease Control and Prevention, 2006. Available from URL: <http://www.cdc.gov/ncidod/diseases/ebv.htm> [Accessed: April 1, 2011]

## Mycobacterium avium complex, HIV-associated

Disseminated disease is the most common presentation of MAC in HIV-infected children, although the incidence of this has dramatically fallen since the introduction of highly active antiretroviral therapy. Reference: Mofenson LM, Brady MT, Danner SP, et al, Centers for Disease Control and Prevention, National Institutes of Health, HIV Medicine Association of the Infectious Diseases Society of America, Pediatric Infectious Diseases Society, American Academy of Pediatrics. Guidelines for the prevention and treatment of opportunistic infections among HIV-exposed and HIV-infected children: recommendations from CDC, the National Institutes of Health, the HIV Medicine Association of the Infectious Diseases Society of America, the Pediatric Infectious Diseases Society, and the American Academy of Pediatrics. *Morbidity & Mortality Weekly Report* 2009;58(RR-11):1-166

## Osteoarthritis

AAOS recommends that glucosamine and/or chondroitin sulfate or hydrochloride not be prescribed for patients with symptomatic osteoarthritis of the knee.

Reference: Richmond J, Hunter D, Irrgang J, et al, American Academy of Orthopaedic Surgeons. American Academy of Orthopaedic Surgeons clinical practice guideline on the treatment of osteoarthritis (OA) of the knee. *Journal of Bone & Joint Surgery - American Volume* 2010;92(4):990-3

## Osteoporosis

Use the lowest dose of glucocorticoids for the shortest duration possible to minimize osteoporosis risk as there may be no dose of glucocorticoids that does not accelerate bone loss or increase fracture risk. Assess, counsel, and advise on preventive strategies against glucocorticoid-induced osteoporosis any patient on any dose of glucocorticoid intended to be used for >3 months.

Reference: Grossman JM, Gordon R, Ranganath VK, et al. American College of Rheumatology 2010 recommendations for the prevention and treatment of glucocorticoid-induced osteoporosis. *Arthritis care & research* 2010;62(11):1515-26

## **Pneumonia, aspiration**

In dysphagic patients with stroke, treatment strategies in minimizing aspiration include: postural changes, increased sensory input, swallowing techniques, active exercise programs, diet modifications, nonoral feedings, psychological support, supportive nursing interventions.

Reference: Miller EL, Murray L, Richards L, et al, American Heart Association Council on Cardiovascular Nursing and the Stroke Council. Comprehensive overview of nursing and interdisciplinary rehabilitation care of the stroke patient. A scientific statement from the American Heart Association. *Stroke* 2010;41(10):2402-48

## **Sickle cell anemia**

Hydroxyurea use in children appeared to be effective and reduced the rate of hospitalization in one randomized study.

Reference: Strouse JJ, Lanzkron S, Beach MC, et al. Hydroxyurea for sickle cell disease: a systematic review for efficacy and toxicity in children. *Pediatrics* 2008;122(6):1332-42.

## **Spontaneous pneumothorax**

Simple manual needle aspiration is recommended for a large primary pneumothorax in stable patients by the British Thoracic Society in their 2010 guidelines for treatment of spontaneous pneumothorax.

The most-recent guidelines from the American College of Chest Physicians were published in 2001, and recommend placing a small-bore catheter or chest tube attached to water seal or a one-way Heimlich valve.

Two meta-analyses of randomized trials investigating pneumothorax management bolster the initial use of manual needle aspiration only compared to the more invasive placement of a chest tube. Both found no significant difference between the two initial management strategies with regard to: immediate success rate, 1-week failure rate, and failure rate at one year. Additionally, needle aspiration was associated with less pain and fewer hospitalizations

References: Baumann MH, Strange C, Heffner JE, et al, American College of Chest Physicians. Management of spontaneous pneumothorax: an American College of Chest Physicians Delphi consensus statement. *Chest* 2001;119(2):590-602; MacDuff A, Arnold A, Harvey J. BTS Pleural Disease Guideline Group. Management of spontaneous pneumothorax: British Thoracic Society Pleural Disease Guideline 2010. *Thorax* 2010;65 2:ii18-ii31; Wakai A, O'Sullivan RG, McCabe G. Simple aspiration versus intercostal tube drainage for primary spontaneous pneumothorax in adults. *Cochrane Database of Systematic Reviews* 2007;1; Zehtabchi S, Rios CL. Management of emergency department patients with primary spontaneous pneumothorax: needle aspiration or tube thoracostomy? *Annals of Emergency Medicine* 2008;51(1):91-100

## **Status epilepticus**

Current evidence-based practices have been reinforced by the latest 2010 EFNS guideline on the management of status epilepticus in adults with the preferred therapy for generalized and complex partial status epilepticus remaining intravenous lorazepam or diazepam.

Reference: Meierkord H, Boon P, Engelsen B, et al. EFNS guideline on the management of status epilepticus in adults. *European Journal of Neurology* 2010; 17(3): 348-55

## **Syncope**

Compliance with home orthostatic training is problematic but in a randomized trial 50% of patients were syncope-free at 6 months compared to 20% of control subjects

Reference: Tan MP, Newton JL, Chadwick TJ, et al. Home orthostatic training in vasovagal syncope modifies autonomic tone: results of a randomized, placebo-controlled pilot study. *Europace* 2010;12(2):240-6

## Toxoplasmosis, HIV-associated

Most infants with congenital toxoplasmosis are asymptomatic at birth, but most will go on to develop late sequelae (eg, retinitis, visual impairment, intellectual or neurologic impairment). It may take months to years for disease to manifest.

References: Mofenson LM, Brady MT, Danner SP, et al, Centers for Disease Control and Prevention, National Institutes of Health, HIV Medicine Association of the Infectious Diseases Society of America, Pediatric Infectious Diseases Society, American Academy of Pediatrics. Guidelines for the prevention and treatment of opportunistic infections among HIV-exposed and HIV-infected children: recommendations from CDC, the National Institutes of Health, the HIV Medicine Association of the Infectious Diseases Society of America, the Pediatric Infectious Diseases Society, and the American Academy of Pediatrics. *Morbidity & Mortality Weekly Report (MMWR)* 2009;58(RR-11):1-166; Azevedo KM, Setúbal S, Lopes VG, et al. Congenital toxoplasmosis transmitted by human immunodeficiency-virus infected women. *Brazilian Journal of Infectious Diseases* 2010;14(2):186-9

## Vaginal delivery

The Centers for Disease Control released new recommendations for the prevention of neonatal group B streptococcal infection for women with penicillin allergy. Erythromycin is no longer recommended for GBS prophylaxis. Cefazolin is the recommended alternative UNLESS the patient has a history of any of the following after receiving penicillin or a cephalosporin: anaphylaxis, angioedema, respiratory distress, or urticaria.

If the patient is at high-risk for these allergic reactions, the isolate should be tested for sensitivity to clindamycin and erythromycin. If the GBS isolate is susceptible to clindamycin, resistant to erythromycin, and there is no inducible clindamycin resistance, then use clindamycin for prophylaxis.

If the isolate is not susceptible to clindamycin, give vancomycin.

Reference: Verani JR, McGee L, Schrag SJ. Division of Bacterial Diseases, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention (CDC). Prevention of perinatal group B streptococcal disease--revised guidelines from CDC, 2010. *Morbidity & Mortality Weekly Report* 2010;59(RR-10):1-36

## Ventricular fibrillation

Resuscitation mnemonic "ABC" has been changed to "CAB" for adults where CPR is initiated with cardiac compression first; recommendation for untrained bystander resuscitation is compression-only CPR in non-asphyxic cardiopulmonary arrest.

Reference: Field JM, Hazinski MF, Sayre MR, et al. Part 1: executive summary: 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation* 2010;122(18 Suppl 3):S640-56

## Ventricular fibrillation & Ventricular tachycardia

Resuscitation mnemonic "ABC" has been changed to "CAB" for adults where CPR is initiated with cardiac compression first; recommendation for untrained bystander resuscitation is compression-only CPR in non-asphyxic cardiopulmonary arrest.

Reference: Field JM, Hazinski MF, Sayre MR, et al. Part 1: executive summary: 2010 American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation* 2010;122(18 Suppl 3):S640-56

## Volume depletion and dehydration

Despite most treatment guidelines recommending Oral Replacement Therapy (ORT) as first-line treatment for mild-to-moderate dehydration, IV Replacement Therapy (IVRT) remains the predominant route of administration for rehydration fluids in the acute care setting in the US. ORT is less costly than IVRT in patients without contraindications to its use.

Reference: Pershad J. A systematic data review of the cost of rehydration therapy. *Applied Health Economics & Health Policy* 2010;8(3):203-14

## For More Information

For more information about Clin-eguide,  
go to [www.clineguide.com](http://www.clineguide.com) or call 1-800-388-8884, option 2.