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Robert Folzenlogen MD

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Inside this issue:

Hospitalist Update

Case of the Month

From the Journals

ID Corner

Calendar

Comments

Hospitalist Update

The Polymorphism of Hospitalists

Damascene Kurukulasuriya MD

As we enter the second decade of the 21st Century, the number of hospitalists has mushroomed and the nature of their work has become highly diversified. This article explores this phenomenon and offers a lexicon for the varied factions of our group:

Hospitalists—first coined in a NEJM article in August, 1996, this general term encompasses all physicians who have a hospital-based practice.

Nocturnalists— gone by day, these night-owls staff our inpatient units during the wee hours; they are often represented by those who found their night float duties during residency to be especially appealing.

Weekists—these hospitalists alternate one week of duty with one week of freedom; initially attractive, this lifestyle has, reportedly, led to a high burn-out rate

Duskists or Dawnists—hired to assist during the busy hours of the day, these physicians are most common in urban areas

Weekendists—providing service only on weekends, these hospitalists are either supplementing their income or escaping the tribulations and duties of family life

Winterists—a godsend for snowbird hospitalists who flock to the Sun Belt during the colder months, these physicians take advantage of an indoor job during the dark and frigid days of winter.

Summerists—a rare breed, these sun-lighters relieve hospitalists who must endure family trips during the dog days of summer

Observationists—these novel pioneers confine themselves to servicing the growth industry of Short Stay and Clinical Decision Units

Of course, this list will continue to grow as the role of hospitalists expands beyond the traditional framework of inpatient care. Contrary to common perception, hospitalists are already filling a variety of niches, defined and shaped by market forces. This requires a high degree of adaptability, provided by a relatively young work force that is

characterized by a dynamic and robust entrepreneurial spirit; a significant shortage of these individuals is an additional factor that promotes and fosters the aforementioned diversity of lifestyles.

Facing a nationwide hospitalist deficit that averages 15%, hospitals must turn to head-hunter organizations and the hospitalist enjoys a certain degree of bargaining power when it comes to their salary and schedule. This scenario is not likely to change in the near future as PCPs opt for an exclusively outpatient practice. In academic centers, where the ACGME is pursuing further restrictions on resident work hours, the demand for clinical hospitalists is especially high and expected to remain so. Finally, increased scrutiny by CMS and private insurance companies will expand the demand for hospitalists, a group that can most effectively deal with the problems related to length of stay, hospital-acquired conditions and readmission rates.

In summary, hospitalists represent the vanguard when it comes to diversified and novel staffing options for hospitals as they face the demands of an ever-changing healthcare system.

HOSPITALIST LUNCH CONFERENCE

MISSOURI ACP MEETING

LAKE OF THE OZARKS

SATURDAY, SEPTEMBER 25

SPEAKERS FROM MU, UMKC AND
WASHINGTON UNIVERSITY

DETAILS TO FOLLOW

CASE OF THE MONTH Sarah Smitherman MD & Robert Lancey MD

A 46 year old white male was admitted from the emergency department with severe pain in his legs, feet and hands, which began two days prior to admission. He described the bilateral pain as shooting and burning in nature; he was writhing in pain and rated its severity as 10/10. He denied trauma, current fever, chills or a history of back pain or arthritis.

The patient reported episodes of this pain since youth and stated that they were worse when he was younger. He also complained of severe fatigue, frequent fevers and an unintentional weight loss of 20 pounds over the past year. He also reported episodic dizziness over the past 20 years which have often been debilitating; these were described as loss of balance, not vertigo. He denied recent chest pain, shortness of breath, nausea, vomiting, hematochezia, melena, constipation or abdominal pain. He reported a history of hearing loss and tinnitus but denied a history of stroke or seizures.

His past medical history includes Meniere's Disease, GERD, CAD (with a stent placed several years ago), LVH on his EKG and chronic, non-healing ulcers on his great toes. Surgery has included cochlear implants for hearing loss and bilateral MTP fusions to aid ulcer healing on his great toes. Medications include gabapentin, amytriptyline and Nexium; he is allergic to IV contrast dye.

Family history is remarkable for a mother with heart disease, TIA and arrhythmias and a maternal grandfather who died of renal failure in his fifties. The patient lives in central Missouri and works as a computer programmer. He denies alcohol abuse or tobacco use.

On admission, vitals revealed T 36.5, P 96, R 22, BP 135/82 and O2 Sat of 98% on RA; pain was rated as 10/10. He was a thin, Caucasian male in significant distress from pain. Cochlear implants were noted. Heart, lung and abdominal exams were normal. Extremity exams revealed no muscular tenderness and no erythema, swelling or tenderness of his joints. Temperature sensation in his legs and feet was significantly impaired; touching the soles of his feet triggered pain that radiated up both legs. Motor strength was 5/5 in all extremities and his cerebellar function was normal. Skin exam revealed multiple punctuate, non-blanching, dark, red and purple papules on his abdomen, hips and fingers.

OK, let's see. This patient is admitted with pain, associated with apparent painful peripheral neuropathy, deafness with cochlear implants, a history of coronary artery disease and a history of chronic pain, dizziness and fatigue. Are these problems related or are there multiple disorders that account for his symptoms? What testing would you order and how would you initially treat the patient?

Admission labs returned WBC 6000, Platelets 221,000, Hgb 13.2 g/dl and Hct 39.2%; the WBC differential was normal. Serum electrolytes were normal, BUN 12, creatinine 0.53 and glucose 93. The LFTs and cardiac enzymes were normal. ESR was 13; CRP was not performed. Urinalysis was normal. The CXR was normal except for tiny nodules in the left upper lobe.

An astute medical student obtained additional family history and found that the patient has multiple family members on his mother's side with kidney disease, heart disease and TIAs. The patient also reported that he has experience these painful crises since early childhood, perhaps as early as 3-4 years of age. Since that time, his symptoms have waxed and waned but, while the pain has generally improved, his hearing loss, dizziness and sensation have worsened. The skin rash has been present since childhood and has gradually spread to more areas. Multiple neurologic workups, including EMGs, have been normal.

Armed with the initial lab data and these additional facts, what is your differential diagnosis? Could it be a genetic disease? Vasculitis? Syphilis? Diabetes? Lupus? (Aren't these disorders always in the differential?) If this is a hereditary disease, what is its linkage? Based upon the family history on his mother's side, perhaps this is an X-linked disorder.

Let's start with this: What is your differential diagnosis for hereditary neuropathies? Charcot-Marie-Tooth, HNPP, muscular dystrophy, others? How about X-linked disorders: Fragile X, McLeod Syndrome, SCID, Sideroblastic Anemia, Duschenne Muscular Dystrophy, Fabry Disease, Hypercalciuria, others?

On subsequent follow up, the patient was diagnosed with Fabry Disease, an X-linked recessive lysosomal storage disease, characterized by a deficiency of alpha-galactosidase A. This leads to an accumulation of globotriaosylceramide or GL-3 in lysosomes of affected tissues. Fabry Disease is caused by a mutation of a gene on Xq22; it occurs in 1 in 55,000 live male births of all ethnicities. As many as 70% of female carriers exhibit symptoms of the disease. The age at diagnosis averages 29 years and the average life span is 50 years with dialysis. An enzyme replacement therapy has been developed which may help to ameliorate end-organ damage in affected patients. Fabrazyme was FDA approved in 2003, costs approximately $250,000 per patient per year and has been shown to clear GSL from capillary endothelium and thereby improve neuropathy, nephropathy and GI symptoms. It is unclear if Fabrazyme decreases the risk for coronary disease or stroke in these patients.

This case illustrates a rare cause of acute pain crisis in adults and reminds us that many patients presenting with acute pain may prove to be educational and, at the same time, pose a diagnostic and therapeutic challenge.

REFERENCES:

Clarke, J., Narrative Review: Fabry Disease, *Annals Intern Med* 2007; 146:425-433

Desnick, R. et al., Fabry Disease, an Under-Recognized Multisystemic Disorder, *Annals Intern Med* 2003; 138:338-346

Martins, A et al., Guidelines to Diagnosis and Monitoring of Fabry Disease and Review of Treatment Experiences, *Journal of Pediatrics* 2009; 155(4):519-531

Moller, A., Neurologic Manifestations in Fabry Disease, *Nature Clincal Practice* 2007; 3:295

Warnock, D., Fabry Disease, *Curr Opin Nephrol Hypertens* 2005; 14:87-95

FROM THE JOURNALS

Robert Folzenlogen MD

The following articles should be of interest to Hospitalists:

Acute Asthma in Adults: A Review

Rodrigo, GJ et al., CHEST 2004; 125:1081

Renal Failure in Cirrhosis

Gines, P and RW Schrier, NEJM 2009; 361:1279

Dilated Cardiomyopathy: A Review

Luk, A. et al., J Clin Pathol 2009; 62: 219

Clinical Advances in the Diagnosis and Therapy of Interstitial Lung Disease

King, TE Jr., Am J Respir Crit Care Med 2005; 172:268

New Serological Markers in Inflammatory Bowel Disease are associated with Complicated Disease Behaviour

Ferrante, M et al., GUT 2007; 56:1394

ID CORNER

William Salzer MD

NEW CLOSTRIDIUM DIFFICILE GUIDELINES

SHEA and IDSA have updated their guidelines on Clostridium difficile, addressing epidemiology, diagnosis, infection control and treatment, including management of patients with relapses.

Cohen, SH et al., Clinical practice guidelines for Clostridium difficile infection in adults: 2010 update by the Society for Healthcare Epidemiology of America (SHEA) and the Infectious Diseases Society of America (IDSA), Infection Control Epidemiology 2010; 31:431-455

Access PDF Download via: http://www.idsociety.org/content.aspx?id=4430#cd

MISSOURI HOSPITALIST SOCIETY

University of Missouri
Division of General Internal Medicine DC043
1 Hospital Drive
Columbia, MO 65212

folzenlogenr@health.missouri.edu

MISSOURI HOSPITALIST CALENDAR

Digestive Disease Week 2010, May 1-5, New Orleans, register via the website: www.ddw.org/wmspage.cfm?parm1=679

American Geriatric Society, Annual Meeting, May 12-15, Orlando, information and registration via www.americangeriatrics.org

Emergency Cardiovascular Care 2010: Transforming STEMI Care, May 21-22, Intercontinental Chicago O'Hare, register via www.acc.org/education/programs

Cardiology Update, Saturday, June 12, Eric P. Newman Education Center, Washington University Med Center; register via http://cme-online.wustl.edu **LOCAL**

Chest 2010, October 30-November 4, Vancouver, BC, register online via: www.chestnet.org/accp/chest/chest-annual-meeting

Hospitalist Lunch Conference, Missouri ACP Meeting, September, 2010; presentations from MU, UMKC, Washington University; details to follow **LOCAL**

Please direct all comments, ideas and newsletter contributions to the Editor:

Robert Folzenlogen MD, folzenlogenr@health.missouri.edu

Please forward this newsletter to Hospitalists that you might know!