Watch for Red Flags in Low Back Pain Patients

BY ROBERT FINN
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SAN FRANCISCO — A careful history and physical exam, without the need for lab tests or radiography, can help identify any red flags in patients presenting with low back pain, David Borenstein, M.D., said at the annual meeting of the American College of Physicians.

The history can distinguish mechanical from systemic disorders, and the physical

exam can distinguish neurologic from nonneurologic conditions, said Dr. Borenstein of George Washington University, Washington.

"Laboratory tests are notably inconsequential," he said. "When you're taking your history and you don't think they have one of these systemic illnesses, you really don't have to do laboratory tests on these individuals."

Laboratory tests can be useful in distinguishing inflammatory from noninflam-

matory disorders, and radiologic tests can confirm a diagnosis derived from other means. But testing can just as easily confuse the issue.

It's critical to quickly identify the 5% or so of patients with cauda equina compression, often associated with an expanding aneurism or a herniated disc because they require emergency surgery. Typically these patients will have urinary retention, incontinence, or saddle anesthesia. In those cases, Dr. Borenstein rec-

ommended getting an MRI on an emergent basis. Results of one recent study showed that patients with cauda equina compression do much better if they get surgery within 48 hours of the start of acute symptoms. Patients whose surgery was delayed often experienced severe and persistent motor deficits, persistent sciatica, and sexual dysfunction (Spine 2000; 25:348-51).

In a history of a patient with low back pain, five areas of questioning can identify many red flags. If the answers to these constitutional symptom questions are all negative, "you can treat an individual with back pain conservatively without doing an x-ray, without doing lab tests, in fact by telling them they're going to get better—and being right most of the time," Dr. Borenstein said.

- ► Weight loss and/or fever can signal either vertebral osteomyelitis or a vertebral neoplasm. Radiography—either a plain x-ray, a CT scan, an MRI, or a bone scan—can be helpful here.
- ▶ Pain at night or with recumbency can signal either a bone tumor or a spinal-cord tumor. "If they tell you pain is worse at night, and they have any neurologic sign, that's a patient for whom I'd get an MRI," he said.
- Morning stiffness that lasts for hours can signal spondyloarthropathy or ankylosing spondylitis. Making this diagnosis is now more critical because effective therapies have recently become available. An x-ray taken with Ferguson's view of the sacroiliac joints is helpful in this diagnosis.
- ▶ A patient who has acute, localized bone pain, equivalent in intensity to a bone fracture "is one of the few times where our laboratory tests can be helpful," Dr. Borenstein said. He suggested getting an erythrocyte sedimentation rate, a CBC, and a chemistry profile. These tests can help differentiate the acute fracture of osteoporosis from a tumor, Paget's disease, or sickle cell disease.
- ▶ Finally, if the patient has viscerogenic pain, the physician should determine whether the pain is colicky, tearing, or episodic. Colicky pain suggests a kidney or gall bladder problem; tearing pain suggests a vascular problem such as an aneurism; and pain that's episodic, coinciding with meals or with the menstrual cycle, suggests pancreatitis, peptic ulcer, or endometriosis.

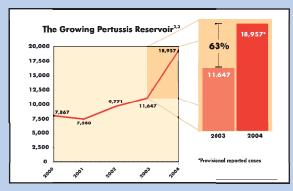
Only about 10%-15% of patients presenting with lower back pain will have one of those red flags, Dr. Borenstein said. Most whose pain has a mechanical origin will get better within 4-8 weeks with conservative therapy that may consist of NSAIDs plus a muscle relaxant.

In fact, telling patients that they'll soon feel better itself has a therapeutic value. It's also good for them to be up and around as they are able, performing the normal activities of daily living. Studies have shown that patients who get 2 weeks of bed rest do no better than those performing normal activities. Patients should be counseled, however, not to go back to a vigorous exercise routine until the episode abates.

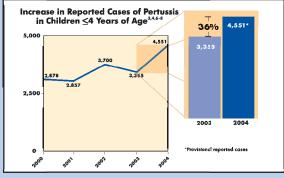
begins at home

The growing threat of pertussis — an often silent disease reservoir

Long thought to be nearly eradicated, pertussis case reports are at a 40-year high.² Today pertussis is the only communicable disease that is on the rise in all age groups for which a routine immunization is available. In 2004 there were 18,957 cases reported to the CDC, a 63% increase over 2003 and a startling 1000% increase from 20 years ago when incidence reached its nadir.^{2,3}

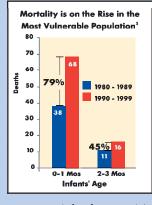


Especially troubling are two facts: first, there has been a 36% increase in reported cases among children ages 4 years or less^{3,4}; second, over the last decade, 80% of deaths attributed to pertussis occurred in infants under 6 months of age.⁵



Among the many explanations on the explosion of pertussis in the United States are better reporting, better diagnosis, and waning immunity. What they all have in common is the acknowledgment that there exists a reservoir of disease among adolescents and adults, and more importantly, from this reservoir pertussis transmission occurs. Pertussis is most contagious during

the first few weeks of illness before it is recognizable. In both adolescents and adults the disease is often mild in nature, and not associated with the trademark "whooping cough." However, studies have reported significant morbidity including pneumonia, rib frac-



tures, urinary incontinence, weight loss, otitis media, and sinusitis. People with pertussis are also at risk of hospitalization and other complications such as seizures and encephalopathy. Beyond the morbidity are the social, financial, and psychological costs of pertussis disease. One recent study reported that 70% of affected adolescents lost 5 to 10 days of school while 49% of afflicted adults were out of work for 5 to 10 days. In addition, 49% of adults reported that their sleep was disturbed for more than 21 consecutive nights with 9% reporting disturbed sleep for an astounding 60+ nights. It's no wonder the ancient Chinese called pertussis "the cough of 100 days."

Soon pertussis prevention will begin in the home too

Building on the heritage of the proven pediatric acellular DTaP vaccines, acellular Tdap vaccines for adolescents and adults will soon be available. This intervention will allow health-care providers to protect a broad spectrum of people from the morbidity of primary disease, as well as limit the morbidity and mortality in vulnerable infants by curtailing disease transmission.

You can find out more about pertussis by visiting any one of the following Web sites:

www.pertussis.com; www.cdc.gov; www.nfid.org; www.napnap.org; www.aap.org

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