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These patients rarely fully recover, but can be managed by a physician who provides consistent follow-up, counseling and support, while avoiding unnecessary procedures and evaluations for every new symptom.

OTHER PSYCHIATRIC DISORDERS THAT MAY LEAD TO PHYSICAL SYMPTOMS

Panic disorder

Anxiety disorders affect about 16% of the population, about 10% of whom have "panic attacks" characterized by an overwhelming, unexplained terror. They often lead to fear of places in which they have occurred. Panic attacks are easily misdiagnosed. In one study, 70% of patients had been to 10 or more physicians without obtaining a diagnosis. Panic disorder differs from phobia in that the episodes are unexpected. The symptoms are not the result of being the center of attention, as in the case of stage fright.

Panic disorder usually responds well to antidepressants, especially imipramine. Treatment may be initiated with time- limited benzodiazepines. In addition, patient education and re- exposure to feared situations are essential for full recovery.

Depression

Depression, which affects 8% of the population, often masquerades as physical illness, because many of its symptoms are somatic. Although treatable, depression can be difficult to diagnose in a patient with an underlying disease, such as cancer. In these cases, self-esteem, capacity for pleasure, and sense of humor help to differentiate depression from symptoms of disease.

Substance abuse

Substance abuse affects 17% of the population and alcohol abuse affects 11%. Alcoholics often have many vague somatic complaints, such as anxiety, insomnia, loss of energy, headaches, and gastrointestinal symptoms. Correct diagnosis usually depends on the history, which the patient is generally unwilling to provide. Relatives provide the most accurate history and should be consulted.

Factitious disorder, malingering

Uncommonly, physical symptoms result from intentional, conscious attempts by the patient to feign disease. Patients who have factitious disorder have an obsessive "need" to be sick; they usually have a severe personality disorder. External incentives for their behavior may be absent or minor. In contrast, external in-

centives are easily recognizable in a malingering patient.

EDWARD C. COVINGTON JR., MD Department of Psychiatry

BIBLIOGRAPHY

Massachusetts General Hospital Handbook of General Hospital Psychiatry, 2nd ed. Hackett TP, Cassem NH, eds. Littleton, MA, PSG Publishing, 1987.

Diagnostic and Statistical Manual of Mental Disorders. Third Edition, Revised (DSM-III-R). American Psychiatric Association, Washington DC. 1987.

Hankin JR, Steinwachs DM, Regier DA, et al. Use of general medical care services by persons with mental disorders. Arch Gen Psychiatry. 1982; 39:235–231.

SEPTIC STERNOCLAVICULAR ARTHRITIS: DIAGNOSTIC CLUES AND MANAGEMENT

Septic arthritis is a common infectious disease with devastating orthopedic and potentially life-threatening complications. Disseminated gonococcal infections continue to account for 50% of all cases of adult septic arthritis. Gonococcal arthritis generally responds well to parenteral penicillin, and severe sequelae are uncommon. Nongonococcal infections of joints have a greater morbidity and occasional mortality. The sternoclavicular (SC) joint is involved in septic arthritis with about the same frequency (5–10%) as the ankle, shoulder, wrist, and elbow. The frequency of involvement as well as several unusual clinical aspects of septic SC arthritis warrant separate consideration.

PATHOPHYSIOLOGY

The SC joint is a true diarthrodial synovial lined joint with a thick interarticular disk. Anatomically, it is close to the thyroid, sternocleidomastoid muscle, first rib, trachea, great vessels, pleura, and mediastinum. It is used very frequently since every movement of the arm is accompanied by rotation at the sternoclavicular joint. These anatomic and physiologic factors may account for many of the clinical aspects of infectious arthritis of the SC joint.

A wide variety of organisms have been reported to infect the SC joint and include mycobacteria, yeast, and most commonly aerobic and anaerobic bacteria. Recent interest has focused on gram-negative infections, predominantly *Pseudomonas* SC arthritis in intravenous

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drug abusers. This may be due, in part, to the occasional use of the jugular veins for injection of illicit substances and appears to be a unique mode of pathogenesis in this type of infection. The SC joint may also become infected by contiguous spread from septic thrombophlebitis. Therefore, it is not surprising to find an association with central lines placed adjacent to the SC joint. *Pseudomonas* is a common pathogen and appears to have an unusual propensity to infect this joint in these situations. Staphylococcal species, predominantly *S aureus*, have also been involved in reported cases of SC infectious arthritis secondary to central lines.

Over the past several years, we have collected over 20 cases of involvement of the SC joint with S aureus. One-third of our patients were drug abusers with associated endocarditis; the next largest group had diabetes mellitus. Several of our patients with the worst prognoses appear to have had no underlying predisposing factors. We have had several patients with an infected SC joint due to S aureus that appeared to have followed median sternotomy. This association has not, to our knowledge, been reported before and deserves mention, given the frequency of median sternotomies.

DIAGNOSIS

Given the oblique orientation of the SC joint and the number of contiguous structures, tomography is often necessary to delineate the extent of bone destruction that so commonly accompanies this clinical entity. The association of osteomyelitis with septic arthritis is due to the underlying virulence of the organism usually involved as well as the subtle and insidious presentation of this disease. Occasional misdiagnosis, which allows infectious arthritis to progress to involve adjacent bony surfaces, may account for this clinical difficulty. CT scanning may be helpful in delineating the joint and visualizing potential abscesses in the mediastinum and pleura, as well as contiguous spread to the first costochondral junction, which abuts closely to the SC joint. Bone scans can be helpful but interpretation can be difficult because the SC joint is one of the first joints to develop osteoarthritis; this may account for difficulty with false-positive scans. In addition, the normal SC joint appears "hot" on bone scan due to adjacent vascular structures such as the great vessel, sternum, and thyroid.

TREATMENT

From a therapeutic viewpoint, there continues to be great controversy about the pros and cons of medical versus surgical management of septic arthritis in general. While there may be a role for conservative management of cases of septic arthritis involving joints other than the hip, our experience suggests that surgical debridement is also needed in septic arthritis of the SC joint. In addition, the surgical approach may be the only way to establish a correct bacteriologic diagnosis due to difficulties with needle aspiration. Initial antibiotic therapy should be selected to cover both *Pseudomonas* and *S aureus* if there have been no other clues from the history or physical examination.

Prognostically, this is a serious infection. We have seen deaths attributable to associated diseases such as endocarditis and sepsis, as well as problems with involvement of adjacent structures such as mediastinum, pleura, and specifically the first costochondral junction. Draining fistulae from unresolved osteomyelitis has been an occasional problem and can lead to cosmetic deformity. If infection is eradicated microbiologically, range of motion and use of the joint is not particularly compromised, even in patients who require surgery.

J. WALTON TOMFORD, MD Department of Infectious Disease

BIBLIOGRAPHY

Goldenberg DL, Reed JI. Bacterial arthritis. N Engl J Med 1985; 312:764-771.

Wohlgethan JR, Newberg AH, Reed JI. The risk of abscess from sterno-clavicular septic arthritis. J Rheumatol 1988; 15:1302–1306.