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Malignancy is the second leading cause of death in the United States, following heart disease. In most cancers, early detection is one of the most important factors in determining prognosis. As clinicians it is therefore important to be aware of potential clues of underlying malignancy on physical examination. Given the wide range of malignancies, and the heterogeneous nature of their presentations, this article is by no means exhaustive. Instead, it discusses in depth some of the more frequently encountered physical examination findings that may suggest malignancy. Specifically, it covers lymphadenopathy, cutaneous findings related to various cancers, and malignancy related thrombosis.

Chronic Obstructive Pulmonary Disease and the Physical Examination  423
Reeni Ann Abraham and Stephanie Kaye Brinker

Performing a hypothesis-driven examination in patients with possible chronic obstructive pulmonary disease (COPD) is an important component of increasing the recognition and diagnosis of this avoidable and costly medical condition. Using known likelihood ratios for various physical examination maneuvers can be combined with known individual risk factors and symptoms to adjust a patient’s post-test probability of having COPD and inform appropriate diagnostic work-up. Equally important is intentionality in history-taking and physical examination procedures for patients with known COPD to mitigate the decreased quality of life and mortality and to monitor response to treatment.

Cirrhosis  437
Rachel Wilson and Donna M. Williams

Cirrhosis is a chronic condition resulting from inflammation and fibrosis of the liver. Patients with cirrhosis may have a myriad of physical examination findings that reflect the severity of the underlying liver disease. Although many signs and symptoms related to cirrhosis are nonspecific, such as abdominal pain, nausea, and malaise, some findings are more specific and point to complications of liver disease. In this article, key physical findings in patients with cirrhosis, including hepatomegaly, splenomegaly, jaundice, ascites, encephalopathy, dilated abdominal wall veins, spider nevi, palmar erythema, and others, are discussed.
Heart disease is the leading cause of death in the United States with an estimated 6 million adults living with heart failure. In patients with heart failure, the physical examination can provide important prognostic information and is also used to guide both diagnosis and management, including determining the need for inpatient versus outpatient management. Presenting symptoms include dyspnea, peripheral edema, orthopnea, paroxysmal nocturnal dyspnea, and bendopnea. In patients with suspected heart failure, a “head-to-toe” physical examination approach is recommended with the addition of special maneuvers such as the measurement of jugular venous pressure, valsala maneuver, and hepatojugular reflux as needed.

Delirium is an acute and fluctuating disorder characterized by a disturbance in attention and cognition. Delirium is underdiagnosed by clinicians, but there are excellent diagnostic tools using history and physical examination that can assist clinicians in making the diagnosis in multiple settings (ie, CAM, CAM-ICU, 3D-CAM, bCAM, 4AT, and UB-CAM). Delirium is caused by underlying medical conditions and is often multifactorial, so a full diagnosis requires a careful assessment for a wide range of underlying conditions. Physical examination has not been well studied in this regard, but still can provide useful clues to the clinician.

Dementia is a common disease worldwide and is largely underdiagnosed. A timely diagnosis of dementia is beneficial for both the patient and family for many reasons, and exclusion and treatment of other mimics of dementia are crucial to avoid long-term consequences. Making a diagnosis of dementia requires attention to subtle cues from both patients and other informants, as often patients and family members will not notice early signs and symptoms. Although universal screening is not recommended by the USPSTF, screening in high-risk populations is recommended by many organizations. Screening with the Mini-Cog and AD8 combined is a highly sensitive way to identify patients with dementia, and confirmation testing can be performed with the MoCA or MMSE. Specific subtypes of dementia, including Alzheimer’s disease, vascular dementia, Lewy body dementia, frontotemporal dementia, and others, sometimes can be differentiated by unique physical examination findings. Timely referral to dementia specialists is useful in the management of this group of diseases. However, as the aging population grows and access to specialists is often limited, it is important for all physicians to understand how to make a diagnosis of dementia.
The physical examination of the patient with diabetes may have revealed findings that confirm the diagnosis, classify the type of diabetes, and begin to evaluate for the macro- and microvascular complications of diabetes and significant comorbid conditions. While screening for the diagnosis of diabetes occurs with assessment for abnormal blood glucose, given the high rates of morbidity and mortality associated with diabetes, utilization of the physical examination plays a key role in identifying patients at risk for the complications of diabetes. The discussion of elements of the physical examination relevant to the patient with diabetes, both type 1 and type 2, will be discussed in this article.

Many common endocrinopathies have classic physical examination findings that can help lead to the diagnosis and cause of disease. This article will discuss the common signs and symptoms seen in Cushing disease, adrenal insufficiency, hyperthyroidism, hypothyroidism, thyroid nodules, and polycystic ovary syndrome (PCOS). A knowledge of these findings and their corresponding diseases will help the clinician to develop a targeted examination for syndromes of excess or deficient cortisol, excess or deficient thyroid hormone, thyroid nodules, and PCOS.

Hypovolemia develops with the loss of extracellular fluid volume or blood. Rapidly identifying hypovolemia can be lifesaving. Indicators of hypovolemia on examination include supine or postural hypotension, increase in heart rate by 30 beats per minute or severe dizziness with standing, and a decrease in central venous pressure detected on visual inspection of the jugular venous pressure or ultrasound assessment of the inferior vena cava or internal jugular veins. Other findings with utility include a dry axilla and dry oral mucosa. With chronic anemia, hemodynamic changes detectable on examination may be minimal, as the body compensates by retaining extracellular volume.

Movement disorders are commonly encountered by the general practitioner and can be divided into two broad categories: hypokinetic and hyperkinetic. The former involves loss or slowing of movement, whereas the latter is characterized by excessive and involuntary movements. A careful history will guide the examiner to the appropriate category of movement disorders. As no laboratory test or radiologic study is confirmatory for these disorders, the diagnosis must be made clinically and the neurologic examination is indispensable. In this article, we discuss physical examination techniques that will help diagnose common movement disorders.
Physical Examination in Human Immunodeficiency Virus Disease 527

Christopher L. Knight

Human immunodeficiency virus (HIV)-associated disease is known for its protean manifestations. However, many of the characteristic findings on physical examination are not associated with HIV infection per se but the numerous opportunistic infections (OIs) that are common in patients with advanced HIV disease. Common findings of acute HIV infection include fever, adenopathy, rash, and oral ulcers. Chronic HIV infection is associated with skin, rheumatologic, and neurologic manifestations. OIs also cause skin, oropharyngeal, ocular, and neurologic manifestations. A skilled clinician can often recognize HIV disease based on the combination of these findings.

Can’t Miss Infections: Endocarditis, Cellulitis, Erysipelas, Necrotizing Fasciitis, Cholecystitis 537

Kim Tartaglia

This article reviews the presentation, physical examination findings, and diagnosis of selective common acute infectious diseases. In this article, we review nonpurulent skin infections, infective endocarditis, and acute cholecystitis.

Approach to the Patient with a Murmur 545

John Landefeld, Melody Tran-Reina, and Mark Henderson

Video content accompanies this article at http://www.medical.theclinics.com.

Patients with valvular heart disease may present with or without symptoms. A thorough cardiac physical examination can identify patients who require further evaluation and management. Although the utility of different cardiac findings varies widely, diastolic murmurs indicate important underlying valvular pathology requiring further investigation, typically with echocardiography. The proper examination of patients with systolic murmurs, the most common murmurs in clinical practice, is fundamental to cost-effective care. We will review the key components of the cardiac examination and findings relevant to functional murmurs, aortic stenosis, mitral valve prolapse and regurgitation, tricuspid regurgitation, hypertrophic cardiomyopathy, aortic regurgitation, and mitral stenosis.