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*Summary: Kawasaki syndrome (KS) is an acute, sometimes fatal vasculitis of young children. KS has replaced acute rheumatic fever as the most common cause of acquired heart disease in children in the United States. The illness is manifested by prolonged fever, conjunctival injection, enanthem, exanthem, erythema and swelling of the hands and feet, and cervical adenopathy. These acute features of illness are self-limiting, but coronary artery abnormalities occur in 20% of untreated patients. The etiology of the illness is unknown, but its clinical and epidemiologic features are most consistent with an infectious cause. Common cardiovascular manifestations of the illness include myocarditis, pericardial effusion, and coronary artery aneurysm formation. Treatment with intravenous gamma globulin (IVGG) and aspirin within the first 10 days of illness reduces the prevalence of coronary artery abnormalities from 20% in those treated with aspirin alone to 4%. Patients who develop coronary artery aneurysms, particularly those who develop giant coronary artery aneurysms, may suffer myocardial infarction secondary to thrombosis or stenosis in the abnormal vessel. Additional research to determine the cause of KS is urgently needed to allow for improved diagnosis, more specific therapy, and prevention of the disorder.*

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*Summary: Although not life-threatening, onychomycosis (a fungal infection of the nail, usually caused by a dermatophyte) constitutes an important public health problem because of its high prevalence (about 10% of the U.S. population) and associated morbidity. The disease can have certain negative consequences for patients, such as pain, and can potentially undermine work and social lives. This review discusses the etiology, classification, diagnosis, and treatment of onychomycosis. Four types of onychomycosis are recognized based on the site and pattern of fungal invasion. Dermatophyte fungi are the predominant pathogens, but yeasts (especially *Candida albicans*) and nondermatophyte molds may also be implicated. Accurate diagnosis requires direct microscopy and fungal culture. The differential diagnosis includes psoriasis, lichen planus, onychogryphosis, and nail trauma. Onychomycosis is more difficult to treat than most dermatophytoses because of the inherent slow growth of the nail. Older antifungal agents (ketoconazole and griseofulvin) are unsuitable for onychomycosis because of their relatively poor efficacy and potential adverse effects. Three recently developed antimycotic agents (flucanazole, itraconazole, and terbinafine) offer high cure rates and good safety profiles. In addition, the short treatment times (<3 months) and intermittent dosing schedules are likely to enhance compliance and reduce the costs of therapy.*

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*Summary:* Dengue fever, a very old disease, has reemerged in the past 20 years with an expanded geographic distribution of both the viruses and the mosquito vectors, increased epidemic activity, the development of hyperendemicity (the cocirculation of multiple serotypes), and the emergence of dengue hemorrhagic fever in new geographic regions. In 1998 this mosquito-borne disease is the most important tropical infectious disease after malaria, with an estimated 100 million cases of dengue fever, 500,000 cases of dengue hemorrhagic fever, and 25,000 deaths annually. The reasons for this resurgence and emergence of dengue hemorrhagic fever in the waning years of the 20th century are complex and not fully understood, but demographic, societal, and public health infrastructure changes in the past 30 years have contributed greatly. This paper reviews the changing epidemiology of dengue and dengue hemorrhagic fever by geographic region, the natural history and transmission cycles, clinical diagnosis of both dengue fever and dengue hemorrhagic fever, serologic and virologic laboratory diagnoses, pathogenesis, surveillance, prevention, and control. A major challenge for public health officials in all tropical areas of the world is to develop and implement sustainable prevention and control programs that will reverse the trend of emergent dengue hemorrhagic fever.

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**Serum Therapy for Tuberculosis Revisited: Reappraisal of the Role of Antibody-Mediated Immunity against *Mycobacterium tuberculosis*.** Aharon Glatman-Freedman and Arturo Casadevall. . . . . 514–532

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**Quantitation of Cytomegalovirus: Methodologic Aspects and Clinical Applications.** Michael Boeckh and Guy Boivin. . . . . 533–554

*Summary:* Cytomegalovirus (CMV) is an important pathogen in transplant recipients and human immunodeficiency virus (HIV)-infected individuals. Major progress has been made in developing quantitative detection methods for CMV in recent years. Due to their high sensitivity,

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