

Preface



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Guest Editor

It was with relish and appreciation that I gratefully accepted the invitation to be Guest Editor of the current issue of *Infectious Disease Clinics of North America* devoted to infections of the head and neck. After all, to be invited back a second time almost 2 decades later, after serving in a similar capacity for an earlier issue published in March 1988 (“Infectious Syndromes of the Head and Neck”), speaks to the importance of the subject matter and offers a rare opportunity to marvel at the incredible advances in medicine and technology in this interim. On the other hand, it also was reassuring that the basic tenets of careful clinical observation, deductive reasoning, and adherence to the scientific method have remained the cornerstone to the diagnosis and treatment of infections of the head and neck. This issue serves to highlight the multispecialty nature of these infections which are seen by family physicians, internists, pediatricians, emergency physicians, dentists, oral surgeons, ophthalmologists, radiologists, and otorhinolaryngologists alike.

Similar to the previous issue, this issue is organized into two sections to present both the basic and clinical information necessary for providing patients the best possible care. The section “General Considerations”, emphasizes the tightly regulated ecologic niches of the indigenous microflora and the highly efficient innate immune system in the head and neck region and highlights the importance of anaerobic bacteria in head and neck infections by Hull and myself. The role of the clinical microbiology laboratory in the

microbiologic investigation of head and neck infections is reviewed, with particular emphasis on recent developments of rapid molecular techniques and the need to distinguish between normal flora and true pathogens by Roscoe and Hoang. An important technological advance has been the refinement of imaging techniques by multidetector CT and MRI, which have revolutionized the ability to visualize fascial borders of soft tissues as well as vascular integrity and parameningeal foci in complex head and neck infections (Hurley and Heran). A selection of radiographic images is offered to illustrate their value in identifying vital structures in head and neck infections, such as the airway, cervical vessels, orbits, paranasal sinuses, deep fascial spaces, intracranial structures, and the spinal canal. Finally, the principles of antimicrobial management for head and neck infections based on suspected source, likely pathogens, predicted susceptibility or resistance patterns, and pharmacokinetic and pharmacodynamic considerations are discussed by Brook. Although the emerging resistance among respiratory pathogens and oral gram-negative anaerobes is emphasized, the use of empiric coverage for resistant pathogens should be dictated by relative risks based on the severity of infection, nature of comorbid disease, and prior exposure to antimicrobial agents rather than merely on the recovery of resistant micro-organisms in mixed culture. In the section “Specific Syndromes,” a variety of head and neck infections are considered, including periorbital and orbital infections (Wald), acute otitis media (Powers), acute and chronic bacterial sinusitis (Brook), pharyngitis and epiglottitis (Alcaide and Bisno), dental caries and periodontitis as two contrasting infectious diseases (Loe-sche), mucositis in the cancer patient and immunosuppressed host (Epstein), cervical lymphadenitis, suppurative parotitis, thyroiditis, and infected cysts (Al-Dajani and Wootton), cervicofacial actinomycosis and mandibular osteomyelitis (Sharkawy), life-threatening peripharyngeal and deep fascial space infections (Reynolds and myself), and vascular and parameningeal infections of the head and neck (Laupland). The article “Diagnosis and Treatment of Acute Otitis Media: Evaluating the Evidence” is particularly poignant in pointing out the paucity of quality evidence supporting the clinical diagnosis and decisions regarding the initiation, choice, and duration of antimicrobial therapy. This paucity of evidence-based data persists even though a diagnosis of acute otitis media is the most common reason for prescribing an antimicrobial agent to children and it is one of the most common reasons overall for anyone in the United States to receive an antimicrobial agent. It is likely the same assessment applies to the diagnosis and treatment of acute bacterial sinusitis, emphasizing the critical need for further research to help clinicians make more informed decisions.

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update will continue to serve as a useful resource for the clinician caring for patients and for the investigator to stimulate further research, which clearly is needed in this important area.

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