given for approximately one-fifth of episodes of febrile neutropenia. Interestingly, recovery of neutropenia occurred within a median of 11 days after fever onset, and peak β-glucan levels for IC occurred after a median of 12 days after fever onset. Hepatosplenic candidosis caused the presentation of all but 1 case of IC. Because fluconazole is not active against Aspergillus species, these data suggest that the use of fluconazole might have influenced the sensitivity of β-glucan testing (only 1 case of candidemia was detected) and the time for the β-glucan test to reach its zenith.

Acknowledgments

Potential conflicts of interest. All authors: no conflicts.

Alessandro C. Pasqualotto1,2 and Teresa C. T. Sukienik1
1Infection Control Department, Santa Casa Complexo Hospitalar, and 2Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

References


Reply to Pasqualotto and Sukienik

To the Editor—We thank Pasqualotto and Sukienik [1] for their interesting comments regarding our publication about 1,3-β-D-glucan (BG) antigenemia for the early diagnosis of invasive aspergillosis (IA) and candidiasis (IC) in neutropenic patients [2]. Because of the morbidity and mortality of these infections, early antifungal therapy is critical. A non-invasive monitoring tool that detects both Aspergillus and Candida species is an attractive approach. A positive result of the screening test may trigger further investigations and preemptive antifungal therapy. Our results suggest that BG may fulfill this goal. Although BG does not differentiate IA from IC, combination of BG data with imaging, culture, and histopathologic data allows an etiological diagnosis in most cases. Moreover, in patients with positive screening results for BG, genus-specific fungal markers (i.e., galactomannan for Aspergillus species [3] and mannann/antimannan for Candida species [4]) may contribute to the differentiation of IA from IC. Because several treatment options that are active against both fungi are now available, therapeutic decisions are less dependent on an immediate etiological diagnosis [5]. A positive BG result may trigger the initiation of antifungal therapy. The complementary investigations may then allow its adjustment. The similar overall survival rates for patients with IA (93%) and IC (89%) in our study support the efficacy of the initial empirical antifungal strategy.

With regard to the diagnostic performance of BG, we observed similar sensitivities, specificities, and positive and negative predictive values for IA (0.60, 0.96, 0.64, and 0.95, respectively) and IC (0.59, 0.96, 0.67, and 0.94, respectively). The median time elapsed from fever onset to positive BG result was also similar (median time, 0 days; range, −25 to 19 days for IA, median time, 2 days, range −1 to 16 days for IC). These results support the efficiency of BG for early detection of both IA and IC. However, as pointed out by Pasqualotto and Sukienik [1], the median time to the peak BG level in IA (median time, 3 days; range, −25 to 25 days) was possibly shorter than for IC (median time, 12 days; range, 1–46 days). The kinetics of other fungal markers is influenced by the timing of antifungal therapy. Ongoing treatment or prophylaxis may result in early and low peaks, whereas late start is associated with delayed and higher peaks [6]. In our study, the use of a Candida-specific prophylaxis (fluconazole in one-fourth of IA and IC cases) did not result in a higher BG sensitivity in IA than in IC. Moreover, the median time elapsed from fever onset to initiation of antifungal therapy was similar for IA (median time, 1 day; range, −13 to 13 days) and IC (median time, 3 days; range, 0–10 days). One might speculate that the early peak in IA and later peak in IC could reflect different pathogeneses. The microbial load may indeed differ: single pulmonary lesions were documented in IA, whereas multiple hepatosplenic lesions suggesting hematogenous dissemination were documented in IC. It remains to be determined whether the concomitance of late BG peak and neutrophil recovery in IC might reflect the reaction induced by the immune restoration typically associated with the radiological appearance of organ abscesses. Because of the small sample size, no firm conclusion can be drawn from our study [2] about the different kinetics of BG in IA and IC.

Acknowledgments

Financial support. Wako Pure Chemical Industries.

Potential conflicts of interest. All authors: no conflicts.

Laurence Senn, Thierry Calandra, Jacques Bille, and Oscar Marchetti
Infectious Diseases Service, Department of Medicine and Institute of Microbiology, Centre Hospitalier Universitaire Vaudois and University of Lausanne, Switzerland

References

3. Maertens J, Verhaegen J, Lagrou K, Van El, Boogaerts M. Screening for circulating galactomannan as a noninvasive diagnostic tool for

Dr. William H. Stewart: Mistaken or Maligned?

To the Editor—Dr. William H. Stewart was the US Surgeon General during 1965–1969 [1]. Despite his significant accomplishments, Dr. Stewart is remembered primarily for his infamous statement: “It is time to close the book on infectious diseases, and declare the war against pestilence won” [2]. Depending on the source, the quote is dated to 1967 or 1969. Infectious diseases specialists, including myself [3, 4], have repeated this quote innumerable times to underscore how wrong it was.

I have spent the past 5 years seeking the primary source for his often-maligned quote, with no success. And I am not the only one. The US Public Health Service Web site informs us that “Although this remark has often been cited in the literature, the Office of the PHS Historian has never been able to locate the source of the statement, or to confirm that Dr. Stewart actually made such a comment. We have asked Dr. Stewart about it, and he cannot recall whether or not he made this statement” [2].

Virtually every reference to the statement is a secondary citation, and many of these secondary citations are circular (i.e., they reference one another rather than a primary source). The only primary reference to this statement, listed in a book about emerging infections [5], regards a speech given by Dr. Stewart at the 65th Annual Meeting of the Association of State and Territorial Health Officers in 1967 [6]. However, the speech contains nothing even remotely resembling the alleged quote. Quite to the contrary, Dr. Stewart actually said, “Warning flags are still flying in the communicable disease field…. While we are engaged in taking on new duties…we cannot and must not lose sight of our traditional program responsibilities” (p. 4).

It is difficult to believe that a Surgeon General who was concerned about the traditional public health responsibility to defend against communicable diseases would declare that the era of infectious diseases had come to a close. It appears that Dr. Stewart’s now-legendary quote may be a medical “urban legend.” Nevertheless, Dr. Anthony Fauci has assured us that the belief that infectious diseases had been conquered was widespread in the 1960s and 1970s [7]. Furthermore, in 1978, one of the world’s leaders in infectious diseases, Dr. Robert Petersdorf, commented that, “Even with my great personal loyalty to Infectious Disease, I cannot conceive of the need for 309 more [graduating trainees in] infectious disease…unless they spend their time cultivating each other” [8, p. 630]. As late as 1985, Dr. Petersdorf had not changed his mind; at the Infectious Diseases Society of America’s annual meeting that year, he stated that “the millennium where fellows in infectious disease will culture one another is almost here” [9].

If anyone is aware of a real primary citation to Dr. Stewart’s quote, I and others would be extremely interested in hearing from you. Failing that, perhaps it is time to replace Dr. Stewart’s possibly apocryphal quotation with citations from verifiable sources, such as Dr. Fauci [7] or Dr. Petersdorf [8, 9].

Acknowledgments

Potential conflicts of interest. B.S.: no conflicts.

Brad Spellberg1

1Division of Infectious Diseases and 2David Geffen School of Medicine, Harbor–University of California Los Angeles, Torrance, California

References


Confounding May Lead to Overestimation of Pneumococcal Polysaccharide Vaccine Effectiveness among HIV-Infected Individuals

To the Editor—In a recently published observational study, Rodriguez-Barradas et al. [1] found that vaccination of HIV-