Admission clinical and laboratory factors associated with death in children with cancer during a febrile neutropenic episode

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BACKGROUND: Early identification of children with cancer at risk for death during a febrile neutropenic (FN) episode may increase their possibility for survival. Our aim was to identify at the time of admission, clinical and laboratory variables differing significantly among children who survived or died during a FN episode. METHODS: In a prospective, multicenter study, children admitted with a high-risk FN episode were uniformly evaluated at enrollment and managed according to a national consensus protocol. Medical charts of children who died were evaluated to determine whether the death could be associated with an infection. Admission clinical and laboratory variables significantly associated with death were identified. RESULTS: A total of 393 (70%) of 561 FN episodes evaluated from June 2004 to December 2005 were classified as high risk for invasive
bacterial infection, of which 14 (3.6%) resulted in an infectious-related death. Deaths occurred from 2 to 27 days after admission, and