Short Communication
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Frequency and Reasons that Families of Children Undergoing Cancer Treatment Do Not Call with a Fever or "Families Frequently Fail to Phone for Fever"

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Abstract

A significant number of families whose children are undergoing cancer treatment do not contact the medical team every time their child had a fever. Possible reasons for not calling are explored and discussed.

Keywords: Fever; Oncology; Pediatrics; Compliance

Short Communication

Fever may be the first sign of an overwhelming bacterial infection in children receiving cancer treatment. Prompt evaluation and administration of antibiotics decreases morbidity and mortality [1,2]. Although institutions may vary slightly in the details of what constitutes a fever, it is standard practice for families of these children to be educated on the importance of contactingthe medical team when their child develops a fever. Our group suspected, however, that a significant number of episodes of fever are never reported. We wanted to determine the frequency of not reporting a fever and explore reasons why a family may not call.

After IRB approval, we identified 37 families whose children had finished cancer chemotherapy more than six months but not more than three years ago, were alive, and in remission. A questionnaire was mailed along with a ten dollar gift card and a return envelope. The questionnaire asked about broad categories of diagnoses (e.g. leukemia/lymphoma, solid tumor, and brain tumor), age of child during the majority of his/her treatment, awareness of the need to call for a fever, whether the family had ever *not* called for a fever, and reasons for not calling. All children had a central catheter during treatment.

We received 19 responses (51%). All families reported that during treatment they were aware that they should call their doctor for a fever. Five families (26%) reported having not called for at least one episode of fever. There was no difference between families who called and those that did not in regard to cancer type or age of child during the majority of treatment, acknowledging that the sample sizes were small.

All families who did not call listed a belief that they could tell if a particular fever was the sign of a serious infection or not as the reason for not calling (response choices “I know when my child is truly sick, and he/she was not truly sick” and “The fever went away with Tylenol or Motrin and did not return, so it could not have been bad”). Two families additionally reported not wanting to have to go to the hospital as the reason for not calling (response choice “I knew the doctor would make me go to the emergency room or hospital and I didn’t want to go or couldn’t go - for example, other children had to stay home or I was working”).

Four of the five families who did not call reported that the fever went away on its own and the child was fine. One family reported that “the fever continued and my child got really sick.” Although the sample size of non-callers was small, the rate of reported significant complications (1 out of 5) was in line with previously reported rates of bacteremia in pediatric oncology patients with central lines [3].

A significant number of families with children undergoing cancer treatment do not contact the medical team to report every fever that their child has during treatment, despite knowledge that they should do so. Even if every un-returned survey reported always having called for a fever, the “no call” response rate would be 13.5%. Providers may need to be more explicit with families that

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the cause of a fever, and thus its potential gravity, cannot always be determined just by how the child looks or if the fever responds to antipyretics. Perhaps intermittent reminders throughout treatment of the potential seriousness (even fatality) of infections in these children would aid compliance. Additionally, the health care team needs to be aware of potential social barriers for a family to come for evaluation of a fever before such a necessity arises. Close and continued involvement with perhaps a social work team may identify and proactively address such barriers. We suspect that these findings apply to other institutions.

References

1. Fletcher M, Hodgkiss H, Zhang S, Browning R, Hadden C, Hoffman T, et al. Prompt administration of antibiotics is associated with improved outcomes in febrile neutropenia in children with cancer. Pediatr Blood Cancer. 2013; 60: 1299-1306.
2. Rosa RG, Goldani LZ. Cohort study of the impact of time to antibiotic administration on mortality in patients with febrile neutropenia. Antimicrob Agents Chemother. 2014; 58: 3799-3803.
3. Schwartz JH, Griffin G, Armatti-Wiltrout A, Ramirez-Garnica G, Sandler E. Effect of Neutrophil Count and Central Venous Access Device on Bacteremia in Febrile Pediatric Oncology Patients (publication 5871.2), in Pediatric Academic Society Proceedings, Toronto. 2007.