

## Isolated Neutropenia in Children: A Cause for Concern?

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When a child has isolated neutropenia, what do you do?

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When a child has isolated neutropenia, what do you do? Do you consult your nearest pediatric hematologist-oncologist or do you simply follow the child yourself with periodic blood counts until the problem resolves itself or other cell lines begin to show changes that can better identify the reason for the neutropenia? To gain a better handle on the causes and natural history of isolated neutropenia, Nagalapuram et al ([10.1542/peds.2019-3637](#)) share with us a retrospective chart review of children

referred to the University of Alabama at Birmingham Pediatric Hematology Oncology clinic with this problem from 2013 to 2018.

155 children with isolated neutropenia are described and then classified as having mild, moderate, severe, and very severe neutropenia. More than half the children described in this article never had a specific diagnosis found for their neutropenia while other children received the diagnosis of viral suppression, autoimmune, and drug-induced neutropenia. There is a lot of interesting information contained in the data shared from this one clinic in regard to what the evaluation and natural history of isolated neutropenia are all about. Most notably, most children in this study had their mild neutropenia resolve without any intervention except time itself. It is also reassuring that no child with isolated neutropenia was diagnosed with a malignancy regardless of severity of the isolated neutropenia. For those who might be worried about neutropenia being a harbinger for an acute infectious illness such as bacteremia, this study reassures in that no bacteremia was identified.

The authors also look at how long the neutropenia persisted, with the hope of offering some guidance as to how often to monitor CBCs in these patients. Treatments such as G-CSF were used for severe cases and the article explains the situations where such treatment might be considered. Still, only 6 of the 155 children received this treatment. There are many other strengths and limitations of the descriptive information, which the authors hope to shape into an algorithm for standardizing the care pathway for diagnosis, treatment, and follow-up of isolated neutropenia. Until then, this study may be the best available to help you decide when to refer, or what tests are needed and how frequently should they be obtained if you opt not to refer. It should

not be a hard sell, we mean sell, to convince you to check out this article being early released this month and learn more.

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