

Table IV. Important clinical signs and symptoms

Indicator	Comments
Fever	Determines need to consider immediate treatment. Periodic fever may suggest cyclic neutropenia. Recurrent fevers suggest more serious type of neutropenia or underlying autoimmune disease.
Gingivitis (1)	Often overlooked and frequently present in untreated clinically significant chronic neutropenia. Normal gingiva argues for normal marrow reserve. Gingivitis can be seen with vasculitis independent of neutropenia.
Mucosal ulcers* (1)	Suggests neutropenia with decreased marrow reserve, especially ulcers with no evidence of exudate. May be seen with vasculitis independent of neutropenia.
Abdominal pain*	Cramping abdominal pain or discomfort, even of a minor nature, can indicate intestinal mucosal ulcerations that can serve as a dangerous portal of entry for enteric bacteria.
Abscess **	Clear purulent material anywhere (ear drum, pharyngeal exudate, boil, other abscess) in the presence of significant neutropenia is strong evidence for adequate marrow reserve and ability to deliver neutrophils to tissue.
Splenomegaly	Indicates a chronic inflammatory state and suggests neutropenia is not benign. May be the only sign of chronic inflammation in some disorders like systemic rheumatoid arthritis or LGL related neutropenia.
Sed Rate (ESR)	Suggests deep tissue inflammation. Erythrocyte sedimentation rate (ESR), can be very helpful in the evaluation of neutropenia and monitoring severe forms of chronic neutropenia.
CRP	Indicates monocyte activation. C-reactive protein suggests inflammation and changes faster than the ESR. The interpretation of CRP and ESR elevation overlap but are not the same. Either can be significantly elevated when the other is normal.
Monocytosis	Significant monocytosis (30 to 50%) is often seen with congenital neutropenia (Cyclic neutropenia, Kostmann syndrome).
Past History	Unusual or frequent major infections, chronic diarrhea, failure to thrive.
Dysmorphia	Dysmorphic features raise issue of primary marrow failure syndromes.
(1)	Note that gingivitis, oral and mucosal ulcerations can also be seen with vasculitis in the presence or absence of neutropenia. Marrow examination in this case is the only way to infer marrow reserve status.
(*) = symptoms and signs suggesting low marrow reserve and (**) adequate reserve	