We present a case of isolated non-febrile neutropenia in COVID-19 infection without any other hematologic abnormalities:

- A 57 years old woman with COVID-19 infection presented with WBC count of 3500 cells/µL with normal absolute neutrophil count (ANC) of 2300 cells/µL.
- On day 2, her WBC counts dropped to 1600 cells/µL. Her differential count showed mild lymphocytosis (50%) and monocytosis (20%) with significant neutropenia with ANC of 400 cells/µL.
- She remained afebrile throughout. She received supportive care including acetaminophen and broad-spectrum prophylactic antibiotics which were discontinued after negative infectious workup.

It is unclear if neutropenia associated with COVID-19 infection results from immune mediated effects or direct viral damage. Possible mechanisms include:
- Bone marrow suppression
- Transient agranulocytosis leading to peripheral neutrophil consumption

Further scientific studies are needed to understand mechanism and management of COVID-19 related neutropenia.

References