

TMA and Infections, A Vicious Circle

Di Palo M¹, Rocco M², Di Sisto A², Pagliuca ^{1,2}, Delgado F², and Sacco M¹

¹Medicina DEA ed elevata complessità clinica – AORN A. Cardarelli, Napoli, Italy

²Medicina di Emergenza – Urgenza – AOU Federico II, Napoli, Italy

*Corresponding author

Di Palo M, Medicina DEA ed elevata complessità clinica – AORN A. Cardarelli, Napoli, Italy.

Received: July 27, 2024; **Accepted:** August 05, 2024; **Published:** September 16, 2024

Background: Thrombotic Microangiopathies (TMA) are rare but serious disease with a pattern of damage that can occur in smallest blood vessels inside many vital organs.

Case History: Female, 62y.o, entered ER due to worsening asthenia, thrombocytopenia and anemia on laboratory tests. Confirmed hemolytic anemia (increased LDH, indirect bilirubin, rare schistocytes on peripheral smear) anti-ADAMTS13 activity assay is performed, which is almost suppressed (< 5%) confirming diagnosis Thrombotic Thrombocytopenic Purpura (TTP). Plasma exchange, caplacizumab and steroids (1mg/kg body weight) were started. During hospitalization, due to increased inflammation indices during an episode of recrudescence (thrombocytopenia and undetectable ADAMTS13 activity) laboratory tests were performed, confirming diagnosis of septic state secondary to *Salmonella typhi* infection, complicated by septic arthritis. Rituximab and antibacterial therapy were started, achieving resolution of the septic state, but due to the persistence of thrombocytopenia (with normal ADAMTS13 activity) and finding of hepatosplenomegaly, was documented reactivation of Cytomegalovirus infections, therefore therapy with Ganciclovir was started, with resolution of the infectious state and TTP.

Discussion: Bacterial/viral infections are commonly observed amongst TMA hospitalized patients and may act as a trigger (including recrudescences and relapses) or a consequence of immunosuppressive therapy; timely diagnosis and most appropriate treatment can help resolve PTT.

References

1. Paul Coppo, Christophe Adrie, Elie Azoulay, Ghislaine Leleu, Eric Oksenhendler, et al. (2003) Infectious diseases as a trigger in thrombotic microangiopathies in intensive care unit (ICU) patients?. *Intensive Care Med* 29: 564-569.
2. Rodrigo Lopes da Silva (2011) Viral-associated thrombotic microangiopathies. *Hematology/Oncology and Stem Cell Therapy*. 4: 51-59.

Copyright: ©2024 Di Palo M, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.