PET-CT Suggestive of Lymphoma but Spirochetes in Lymph Node Biopsy: Careful for Prozone Phenomenon in Syphilis

Dries Deeren¹,* and Edwin Steenkiste²

¹Department of hematology; ²Department of pathology, Wilgenstraat 2 B-8800 Roeselare, Belgium

PAPER

A 38 y old male presented with arthralgia, bone pain, rash, constitutional symptoms, sensory neuropathy and generalized lymphadenopathy. The Venereal Disease Research Laboratory test (VDRL) was negative. PET-CT was suggestive of lymphoma with generalized cervical lymph node showed spirochetes (Figure 2 – spiral shaped long bacteria). Retesting for syphilis with the Treponema pallidum hemagglutination assay (TPHA) was strongly positive.

The prozone phenomenon in the VDRL test refers to a false-negative agglutination test resulting from high antibody titers. If too many antibodies are present that can bind to the antigen, antibodies coat all antigenic sites and few or no antibodies are able to bind more than one antigenic particle. It may occur in nontreponemal tests for syphilis [1].

Figure 1: PET-CT was suggestive of lymphoma with generalized lymphadenopathy and hot spots in bone without CT abnormality.

lymphadenopathy and hot spots in bone without CT abnormality (Figure 1). Biopsy of the most PET-positive
Figure 2: Lymph node biopsy showed spirochetes (spiral shaped long bacteria).

REFERENCE


http://dx.doi.org/10.15379/2408-9788.2016.03.02.05

© 2016 Deeren and Steenkiste; Licensee Cosmos Scholars Publishing House. This is an open access article licensed under the terms of the Creative Commons Attribution Non-Commercial License (http://creativecommons.org/licenses/by-nc/3.0/), which permits unrestricted, non-commercial use, distribution and reproduction in any medium, provided the work is properly cited.