Kikuchi-Fujimoto disease and COVID-19 vaccination or infection

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Dear Editor,

We read the informative case study by Villamizar Jiménez MA, et al. on Kikuchi-Fujimori disease (KFD) in a 20-year-old male with a complaint of nine days of diarrhea, fever, chills, and abdominal erythema, along with weight loss (1). He had no history of infectious or autoimmune diseases nor recent vaccinations. The physical exam showed generalized skin erythema and enlarged cervical, axillary and inguinal lymph nodes. The complementary tests showed pancytopenia and elevated acute phase reactants, with no infectious agent isolated. However, the histopathological information from the axillary lymph node biopsy was consistent with KFD. He was discharged to home (with NSAIDs PRN for symptoms) 18 days after admission, after a week with no fever and improved pancytopenia (1). The authors presented an educational review of the main reasons to suspect KFD, emphasizing the inclusion of this entity in the differential diagnosis (1).

In this context, and based on recent data in the literature, the goal of the additional comments is to increase the interest of healthcare workers in general in the relationship between KFD and COVID-19 infections or vaccines (2-5).

Kumar A, et al. reported the case of a 10-year-old girl who had a fever for three weeks, along with bilateral cervical lymphadenopathy, and a generalized macular rash due to KFD that appeared six weeks after her COVID-19 infection (2). She had anemia, leukopenia, and an elevated ESR and LDH. The lymph node biopsy showed CD123+ dendritic plasmacytoid cells, non-caseating necrosis, karyorrhectic nuclei, CD68+ histiocytes and activated CD8+ T lymphocytes, which confirmed KFD (2).

Lencastre Monteiro R, et al. described a 41-year-old woman who had a COVID-19 infection 10 weeks prior to developing a fever, cervical lymphadenopathy, a skin rash and hepatosplenomegaly, along with thrombocytopenia, elevated acute phase proteins and LDH, and a cervical lymph node biopsy pattern that confirmed KFD (3).

Rodríguez-Ferreras A, et al. reviewed the Spanish and European databases of adverse events (FEDRA and EudraVigilance) for reports related to COVID-19 vaccines (4). EudraVigilance had 14 cases of COVID-19 vaccine-related KFD, and FEDRA only had one report of COVID-19 vaccine-related KFD (4).

Yamada R, et al. reported a 32-year-old woman with a two-week complaint of fever and cervical and axillary lymphadenopathy that developed three weeks after a COVID-19 infection (5). The laboratory tests showed mildly elevated C-reactive protein and normal leukocytes; the cervical lymph node biopsy showed karyorrhectic nuclei, necrosis, and abundant histiocytes positive for CD33, CD68, CD163, CD204, Iba-1, PU and myeloperoxidase; and most of the lymphocytes were CD3 positive T cells (5).

Keywords: COVID-19, histiocytic necrotizing lymphadenitis, infection, Kikuchi-Fujimoto disease, vaccine

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