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Mesenteric Lymphadenopathy: a Rare Case of Rosai-Dorfman Disease

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Introduction: Rosai-Dorfman Disease (RDD) is rare with approximately 100 new cases annually in the United States and a mean age of 20.6 years (1). RDD is characterized by massive lymphadenopathy and sinus histiocytosis (1). Bilateral cervical lymphadenopathy is the typical presentation, however extra nodal sites have been noted (1). This case discusses manifestations of a rare disease state.

Case Presentation: A 19-year-old male with a history of eczema and juvenile rheumatoid arthritis presented to the emergency room with four days of diffuse abdominal pain localized to the left upper quadrant, radiation to the right lateral ribs with nausea and diarrhea. He reported an unintentional weight loss of 30 pounds in the last three months. Physical exam revealed generalized abdominal tenderness and rebound. Computed tomography of the abdomen and pelvis (CTAP) along with routine labs were ordered. CTAP showed retroperitoneal lymphadenopathy up to two centimeters in the short axis and mesenteric adenopathy with a 15 millimeter lymph node in the right lower quadrant. Histopathology reported necrotizing granulomatous lymphadenitis with benign sinus histiocytes. Referral to rheumatology was made and treatment was initiated with prednisone 20 milligrams daily with plans for repeat abdominal imaging to evaluate for reduction of adenopathy.

Discussion: RDD coexists with immunologic disease in 10% of cases.3 It has been associated with systemic lupus erythematous, idiopathic juvenile arthritis, autoimmune hemolytic anemia,24 and one case of RAS-associated autoimmune leukoproliferative disease (1). The prognosis for RDD is indolent, 50% of patients experiencing resolution, one third with residual asymptomatic adenopathy and 17% with persistent symptomatology (2). Our case highlights our patient's associated history of juvenile rheumatoid arthritis now presenting with histological findings of RDD. A methodical approach to assessing patients with diffuse abdominal pain and ensured collaboration amongst different medical specialists will ensure favorable treatment outcomes.

References

1. Abla, O., Jacobsen, E., Picarsic, J., Krenova, Z., Jaffe, R., Emile, J.F., Durham, B.H., Braier, J., Charlotte, F., Donadieu, J., Cohen-Aubart, F., Rodriguez-Galindo, C., Allen, C., Whitlock, J.A., Weitzman, S., McClain, K.L., Haroche, J., Diamond, E.L. *Consensus recommendations for the*

diagnosis and clinical management of Rosai-Dorfman-Destombes disease. Blood, Jun 28 2018. **131**(26): pp.2877-2890. doi: 10.1182/blood-2018-03-839753

2. Sodhi, K.S., Suri, S., Nijhawan, R., Kang, M., Gautam, V. *Rosai-Dorfman disease: unusual cause of diffuse and massive retroperitoneal lymphadenopathy.* Br J Radiol, Sep 2005. **78**(933): pp.845-7. doi: 10.1259/bjr/23127241