CLINICAL VIGNETTE

Migratory Arthritis as a Presenting Symptom of Gastric Cancer

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Introduction

A 61-year-old male presented to rheumatology with several months of intermittent pain of the large joints, including elbow, knees, shoulders, and wrists. The pain intensity varied from moderate to severe and was not relieved by non-steroidal anti-inflammatory medications. His symptoms did not correlate with activity, and he denied significant morning stiffness. Physical exam revealed no joint swelling, warmth or erythema. A well-defined erythematous annular rash with scaly patches was noted on this buttocks with negative KOH prep.

Extensive laboratory testing was obtained. Alkaline phosphatase was slightly elevated at 113 U/L (37-113 U/L). Complete blood count, ESR, CRP, TSH, ANA, RF, CCP, SSA/SSB, ANCA and complement levels were all unremarkable. He had a normal SPEP and UPEP. Hepatitis C antibody was non-reactive. He had a slightly elevated thyroid peroxidase antibody at 36.5 (<20 IU/ml). Given the mild presentation and intermittent nature of his symptoms, post-viral migratory arthritis was highest on the differential, and he was advised to monitor symptoms and to return for follow-up visit in one month.

Prior to his follow-up visit, he presented to the emergency department with 2 days of severe joint pain associated with non-bloody diarrhea, fevers, sweats, and inability to tolerate oral intake. He underwent CT imaging of the abdomen and pelvis which revealed a gastric mass, cecal thickening and multiple liver lesions concerning for metastases. His rheumatologic and gastrointestinal symptoms spontaneously resolved without intervention.

Upper endoscopy revealed a 4 cm fungating, ulcerated mass in the gastric cardia, located 2 cm from the gastroesophageal junction. Colonoscopy showed only internal hemorrhoids. Pathology from the gastric mass revealed moderate to poorly differentiated carcinoma. Biopsy of the liver mass revealed moderate to poorly differentiated adenocarcinoma, consistent with a gastric primary tumor.

Discussion

Inflammatory arthritis has rarely been reported, as the sole presenting sign of a paraneoplastic phenomenon. Most commonly, it occurs with lymphoma and in association with other symptoms that warrant evaluation for malignancy.[1] Rheumatologic symptoms including arthritis, myositis, periostitis, fasciitis and osteomalacia have been associated with paraneoplastic syndromes.[2]

Our patient had symptoms of asymmetric palindromic arthritis months prior to onset of symptoms raising concern for malignancy.

Paraneoplastic inflammatory arthritis has been described in association with myelodysplastic syndrome and hematological malignancies but rarely in association with solid tumors.[3]

Typically, paraneoplastic arthritis has been associated with anemia or abnormalities of white blood count differential. In this case, the asymmetric arthritis presentation without diarrheal illness or known STD exposure. His symptoms were initially refractory to NSAIDS and steroids. Initial laboratory testing did not show anemia, abnormal white blood cell count, or elevated markers of inflammation to warrant hematological evaluation. He had a self-limited buttock rash which was KOH negative, and resolved spontaneously.

This case suggests atypical palindromic arthritis refractory to NSAIDS and steroids, can be associated with underlying malignancy.

REFERENCES

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