

Introduction

- Rheumatoid arthritis has a prevalence of around 0.5-1%.¹
- Extra-articular manifestations, including rheumatoid nodules, can be present in up to 40% of individuals.²
- Rarely, rheumatoid nodules can manifest in the gastrointestinal system.

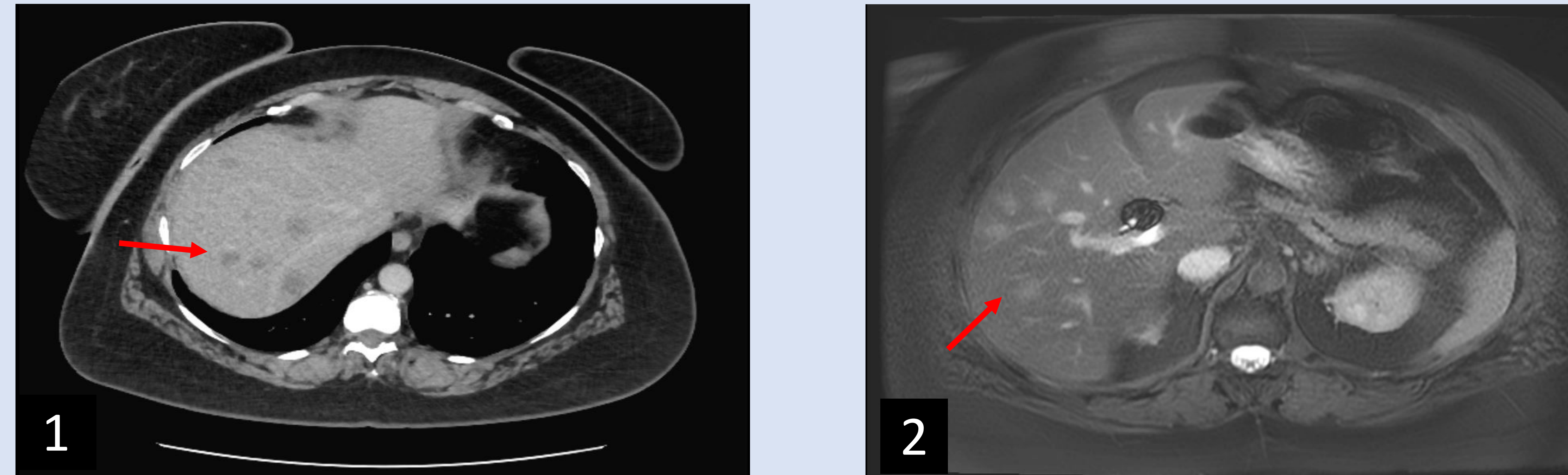
Case Presentation

- 52 yo woman with seronegative rheumatoid arthritis on sulfasalazine 1000mg BID presented with 3 weeks of fevers ranging from 101 – 103 F
- Previously on adalimumab until 1yr ago when developed psoriatic rash
- 6 mo prior had non-diagnostic IR biopsy of left upper lobe pulmonary nodule
- Patient was afebrile with stable vital signs

Pertinent Laboratory Data

WBC 25	AST 16
CRP 6.44	ALT 30
ESR 70	Alk Phos 179
	Total bilirubin 0.3

Imaging



Figures 1 and 2. CT and MRI Studies Revealing Multiple Hepatic Hypodensities

Clinical Course

- Patient remained afebrile
- WBC improved without antibiotics
- Infectious workup was negative (including blood and urine cultures, Hepatitis panel, QuantiFERON-TB Gold, TTE)
- Malignancy workup was negative (including CA125, CA 19-9, CEA, transvaginal U/S, colonoscopy)
- ANA was positive 1:40 in 2020
- IR Liver Biopsy and Pathology
 - Multiple necrotizing granulomas with plasma cells, most concerning for rheumatoid nodules**

Final Diagnosis and Management

Final diagnosis

Rheumatoid nodules in the liver secondary to seronegative rheumatoid arthritis

Management

- Rheumatology and hepatology were consulted prior to discharge
- Increased the patient's sulfasalazine at next rheumatology follow-up
- Repeat abdominal imaging in three months

Discussion

- Rheumatoid nodules in the liver are rare
 - Only three cases have been published with similar findings^{2,3,4}
- Cells in rheumatoid nodules produce similar proinflammatory cytokines and cell adhesion molecules as those in synovial membranes^{6,7}
 - This could suggest cytokine release due to rheumatoid nodules in our patient as a cause of her recent fevers
- TNF inhibitors have been noted to cause rheumatoid nodules in the lungs⁸
 - Patient was also previously treated with a TNF inhibitor (adalimumab)
 - May have led to her pulmonary and hepatic nodules

Conclusion

- Although extra-articular disease is evident in rheumatoid arthritis, rheumatoid nodules in the liver are exceedingly rare. Our case adds to the data highlighting uncommon gastrointestinal manifestations of rheumatoid arthritis.

References

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