Monoclonal Gammopathy of Renal Significance due to COVID-19 Vaccine

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INTRODUCTION

Monoclonal gammopathy of renal significance is a B-cell or plasma-cell clonal disorder that does not meet the criteria for cancer but produces a monoclonal immunoglobulin that leads to kidney injury or disease.

METHOD

A 69 year old female with PMHx of polymyalgia rheumatica, hyperlipidemia, and vitamin D deficiency, and OA presented to the outpatient office with two weeks of lower extremity swelling and 20lb weight gain after getting COVID vaccine 2 days prior.

RESULTS & DISCUSSION

Patient had labs drawn – CBC, CMP, UA SPEP, UPEP and immunofixation. The following imaging modalities were obtained – renal biopsy, bone marrow biopsy, and referrals were made to nephrology and hematology/oncology. The results of blood work showed microcytic anemia, acute kidney injury, however no leukocytosis. A urine analysis showed significant proteinuria and significantly elevated free kappa/lambda light chain ratio. A renal biopsy showed concern for thrombotic microangiopathy, positive IgM and kappa staining. A bone marrow biopsy showed plasma cells of 0.1% but there were no signs of abnormal cell population. Hematology was seen and stated that the patient showed no evidence of multiple myeloma. Nephrology was following the patient and monitored proteinuria, free kappa/lambda light chain ratio with each outpatient visit and started her on Losartan.

CONCLUSION

The results from imaging and lab work were concerning for monoclonal gammopathy of renal significance. in the setting of COVID vaccine administration.

REFERENCES

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