

## A case of gross hematuria and IgA nephropathy flare-up following SARS-CoV-2 vaccination



**To the editor:** We read with great interest the report of Negrea and Rovin of 2 cases of IgA nephropathy with gross hematuria following the Moderna vaccine for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).<sup>1</sup> We also cared for a 52-year-old Asian female with prior biopsy-proven IgA nephropathy who developed gross hematuria within 24 hours of receiving a second dose of the Pfizer vaccine. **Table 1** summarizes clinical data. Her workup was notable for proteinuria of 4.2 g/g of creatinine with serum creatinine at baseline. Of note, SARS-CoV-2 antibody testing prior to vaccination was negative, and she developed no symptoms after the first vaccine dose. Repeated testing within 1 week demonstrated resolution of hematuria and improving proteinuria. Interestingly, she developed gross hematuria following the first shot of the Shingrix vaccine 2 years prior but no symptoms following annual influenza vaccinations. The IgA nephropathy flare in our patient following the second SARS-CoV-2 vaccine dose without known prior exposure to SARS-CoV-2 suggests it was mediated by a delayed-type hypersensitivity reaction. Vasculitis flare-ups following vaccinations have been reported in the past.<sup>2,3</sup>

Our patient's symptoms improved within a week without any intervention aside from continued renin-angiotensin-aldosterone system blockade. It has been reported that severe coronavirus disease 2019 (COVID-19) illnesses can trigger an IgA response in the bronchial mucosa.<sup>4</sup> However, it is unclear how a nonmucosal vaccine triggers this response. We suggest that nephrologists closely follow their patients after COVID-19 vaccination to evaluate for varying degrees of flares, particularly after the second dose of an mRNA vaccine without prior exposure to SARS-CoV-2.

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## Acute rejection after anti-SARS-CoV-2 mRNA vaccination in a patient who underwent a kidney transplant



**To the editor:** Anti-severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) vaccination is recommended in patients who underwent a transplant because of an increased risk of developing severe coronavirus disease 2019 (COVID-19), and mortality.<sup>1</sup> Because of a weak immunogenicity of mRNA 2-dose vaccines in transplant patients, the French

**Table 1 | Patient symptoms and details of workup**

Patient characteristic	Data
Year of IgAN diagnosis	2017
Exacerbations since diagnosis	1. April 2019 following URI 2. June 2019 following shingles vaccine
Current treatment	Lisinopril
Baseline Cre	0.7–0.8 g/dl
Last urine microalbumin/Cre before exacerbation (2020)	633.1 mg/g
Urine microalbumin/Cre 48 h after Pfizer second dose	Baseline always <1000 mg/g, except exacerbations
Gross hematuria/RBCs in urine	2411.3 mg/g
Other symptoms	Yes/yes
Urine microalbumin/Cre 5 d after Pfizer second dose	Fever, myalgias, body aches, lower back pain bilaterally
Hematuria 5 d after Pfizer second dose	1441 mg/g
	Resolved

Cre, creatinine; IgAN, IgA nephropathy; RBC, red blood cell; URI, upper respiratory tract infection.