



## Bilateral Pulmonary Embolism and Renal Vein Thrombosis in a Patient with Nephrotic Syndrome

Sabine Karam<sup>1,2\*</sup>, Rima El Hosni<sup>1,2</sup> and Ali Jibai<sup>3</sup>

<sup>1</sup>Department of Medicine, Saint George Hospital University Medical Center, Lebanon

<sup>2</sup>Department of Medicine, Clemenceau Medical Center, Lebanon

<sup>3</sup>Department of Medicine, Bahman Hospital, Lebanon

### Keywords

Nephrotic syndrome; Anticoagulation; Thrombosis; Obesity.

### Clinical Image

A 66-year-old female, with a long standing history of obesity (BMI=37 kg/m<sup>2</sup>), hypothyroidism, hypertension and dyslipidemia presented to the emergency department for bilateral flank pain associated with bilateral lower extremity edema. A kidney biopsy had been performed a few days prior to her presentation for nephrotic syndrome with a normal serum creatinine level at 0.98 mg/dL, a urinary protein excretion of 9.97 g/g of creatinine and an albumin level at 2.4 g/dL with the biopsy result still pending. A computed tomography scan of the chest, abdomen and pelvis with IV and oral contrast revealed bilateral pulmonary embolism (Figure 1) and subtotal thrombosis of both renal veins (Figure 2). A small left peri-renal hematoma was also seen (related to the biopsy). A Doppler study of both lower limbs excluded any deep vein thrombosis. She was admitted and anticoagulation therapy was initiated immediately. She also underwent a hypercoagulable workup that included anti-cardiolipin antibodies and lupus anti-coagulant and was negative. The kidney

### OPEN ACCESS

#### \*Correspondence:

Sabine Karam, Department of Medicine,  
Saint-George Hospital University  
Medical Center, Youssef Sursok Street,  
Achrafieh, Beirut, Lebanon, Tel: +961-  
78877323;

E-mail: sykaram@stgeorgehospital.org

Received Date: 06 Jan 2022

Accepted Date: 31 Jan 2022

Published Date: 04 Feb 2022

#### Citation:

Karam S, El Hosni R, Jibai A. Bilateral  
Pulmonary Embolism and Renal Vein  
Thrombosis in a Patient with Nephrotic  
Syndrome. Clin Case Rep Int. 2022; 6:  
1276.

Copyright © 2022 Sabine Karam. This  
is an open access article distributed  
under the Creative Commons Attribution  
License, which permits unrestricted  
use, distribution, and reproduction in  
any medium, provided the original work  
is properly cited.

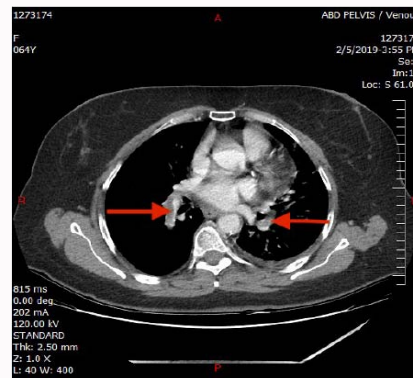


Figure 1: Computed tomography axial view showing bilateral pulmonary embolism (arrows).

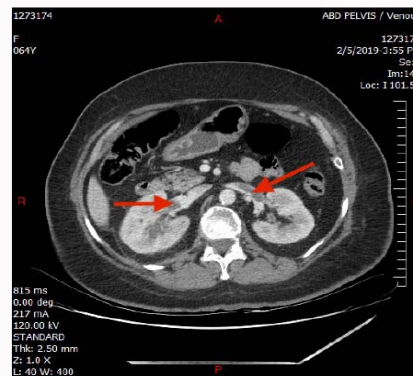


Figure 2: Computed tomography axial view showing subtotal occlusion of bilateral renal veins (arrows).

biopsy revealed membranous nephropathy with negative PLA2 receptor antibody titers. Although the association of hypercoagulable state with membranous nephropathy is well known and calls for anti-coagulation whenever the albumin level is less than 2.5 g/dL, this dramatic presentation calls for initiation of anti-coagulation without waiting for further work up and kidney biopsy results whenever factors such morbid obesity, a proteinuria of more than 10 g and an albumin level of less than 2.5 g/dL are present, as advocated for any nephrotic syndrome by the most recent KDIGO guidelines [1].

## References

1. Rovin BH, Adler SG, Barratt J, Bridoux F, Burdge KA, Chan TM, et al. Executive summary of the KDIGO 2021 guideline for the management of glomerular diseases. *Kidney Int.* 2021;100(4):753-79.