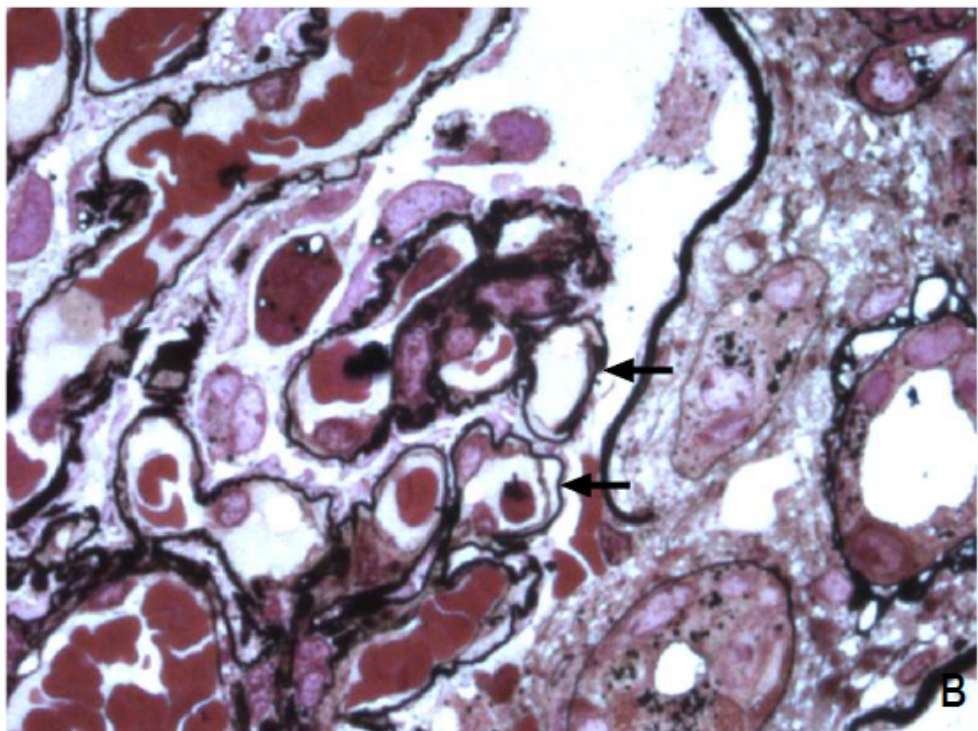
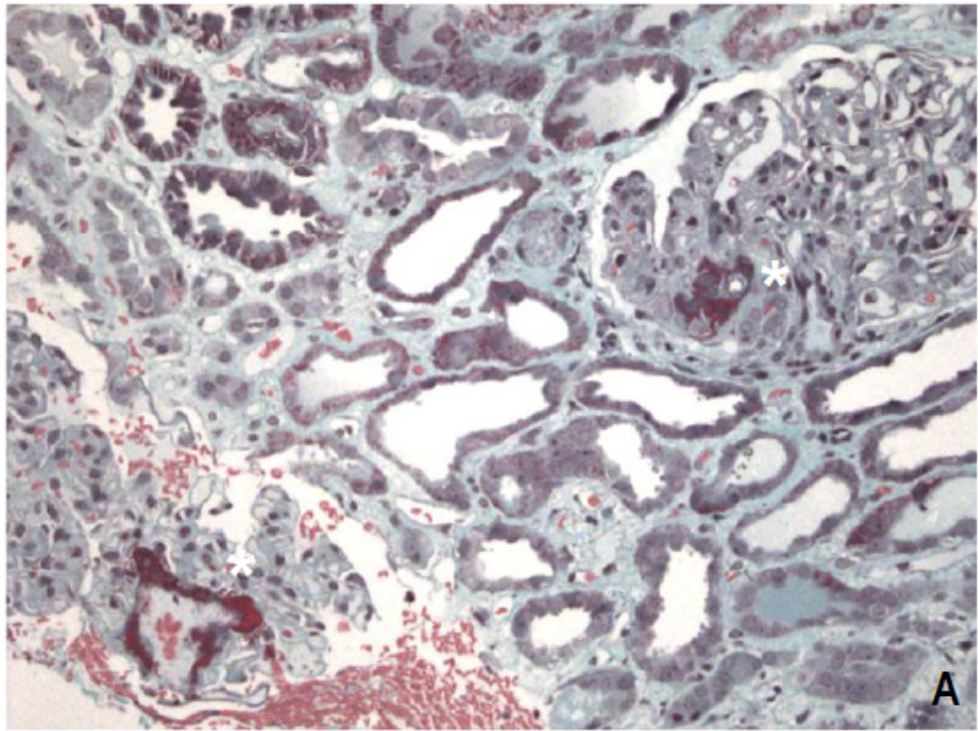
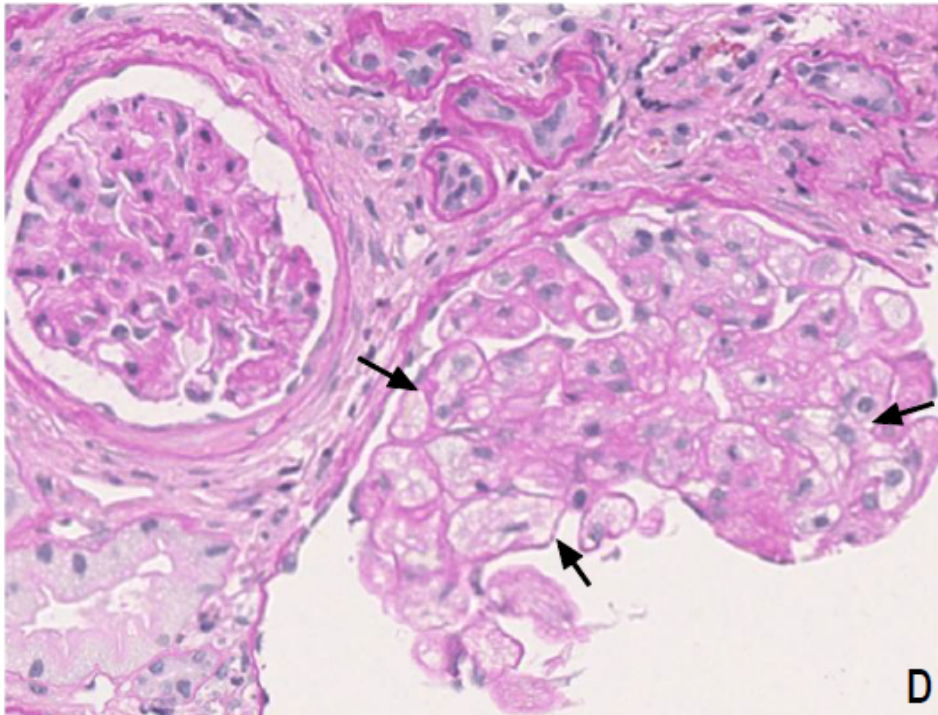
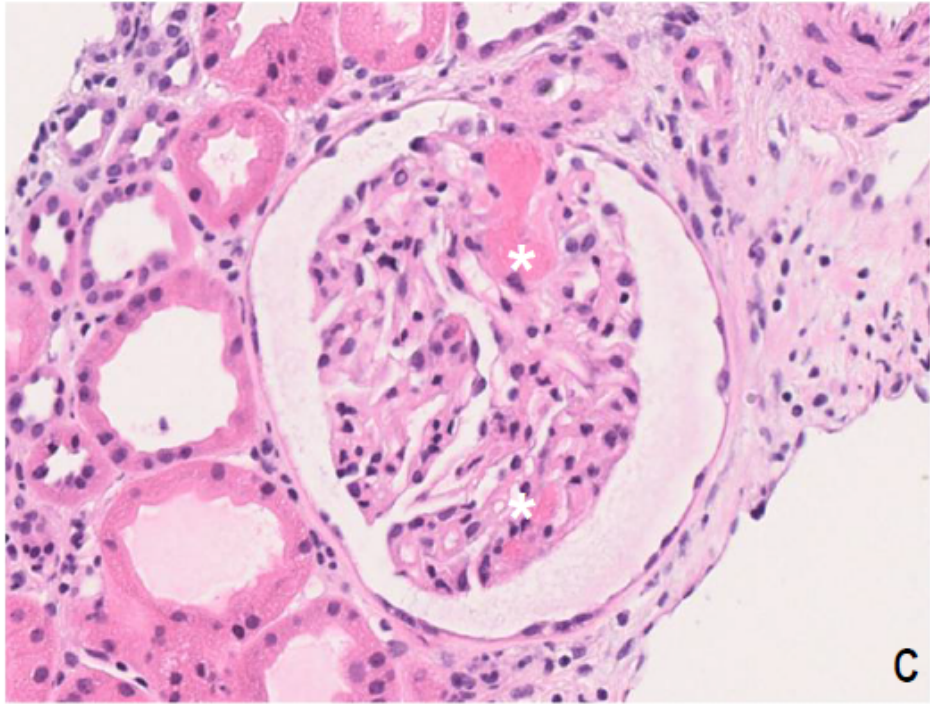


Supplemental Figure S1: Course of Covid-19-associated renal thrombotic microangiopathy (TMA) affecting the native kidneys or renal transplants (filled green rectangles). **Abbreviations:** M, male, F, female. Y, years. SCr, serum creatinine. Plt, platelet count. HD, hemodialysis.





Supplemental Figure S2:

A-B. Kidney biopsy performed in a 66-year old male patient who presented with COVID-19 associated thrombotic microangiopathy (patient 1).

A) Light microscopy. Masson's trichrome staining (original magnification x 200). Presence of thrombi (*) in the glomerular capillaries. Acute tubular injury is also noted.

B) Light microscopy. Jones silver staining (original magnification x 1000). Features of endothelial swelling and detachment from the basement membrane (arrows).

C-D. Kidney biopsy performed in a 38-year old female kidney recipient patient who presented with COVID-19 associated thrombotic microangiopathy (patient 5).

C) Light microscopy. Hematoxylin and eosin staining (original magnification x 200). Presence of thrombi (*) in the glomerular capillaries.

D) Light microscopy. Hematoxylin and eosin staining (original magnification x 200). Marked dilatation of glomerular capillaries with endothelial cells swelling (arrows).

Ref	Gender, Age	NK//RT (nephropathy/ time from RT)	Time from Covid-19 diagnosis to TMA	At TMA diagnosis						Kidney biopsy	Complement work-up	Covid-19 treatment	TMA treatment	F-up	Outcome
				SCr (mg/dL)	Plt (G/L)	Hb (g/dL)	Hapto. (0.3-2g/L)	LDH (xULN)	Puria						
1	F, 69y	NK	14d (symptoms onset)	2.6 (HD)	85	12.9	< 0.2	4.4	1.4 g/L	Cortical necrosis. Glomerular thrombi.	Elevated Bb and SC5b-9 plasma levels. Low FH level. No genetic data.	HCQ LMWH Anakinra Tocilizumab Covalent plasma MV	Eculizumab (n=1)	23d	Death
2	M, 39y	NK (IgAN)*	6d	4.7	80	7.6	< 0.1	2	4.2 g/d	Endocapillary proliferation, endotheliosis. GBM duplication. No thrombi. Muroid thickening/obliteration of a small artery. Chronic IgAN	Decreased plasma C3 and increased C3d and Bb plasma levels. C3 gene variant (c.481C>T; p.Arg161Trp). At-risk CD46 haplotype (GGAAC) (hom.).	-	PE LMWH Eculizumab	49d	HD
3	M, 40s	RT (Liddle syndrome /9y).	11d	8.79 (HD)	12	7.5	< 0.6	2.9	NA	NA	"Normal complement studies"	HCQ Azithromycin MP Reduced tacrolimus dose. Everolimus discontinued.	PE	36d	Recovery of renal function.
4	F, 49y	RT (FSGS, 3M)	9d	4.04	128	8.9	0.12	5	NA	Thrombi in small arteries. Obliteration of the hilar arteriolar lumina in glomeruli. Wrinkling of the GBM. ATN.	NA	-	Reduced tacrolimus dosage.	36d	SCr decreased to baseline levels (1.71 mg/dL).

Supplemental Table 1: Characteristics of four previously reported cases of Covid-19 associated renal thrombotic microangiopathy (TMA).

Abbreviations: Pt, patient. NK, native kidneys. RT, renal transplantation. M, male, F, female, y, years. D, days. M, months. NAS, nephroangiosclerosis. FSGS, focal segmental glomerulosclerosis. IgAN, IgA nephropathy. ULN, upper limit of normal. F-up, follow-up. SCr, serum creatinine. Plt, platelet count. Hb, haemoglobin. Hapto, haptoglobin. LDH, lactate dehydrogenase. Puria, proteinuria. HD, hemodialysis. PE, plasma exchange. ATN, acute tubular necrosis. GBM, glomerular basement membrane. F-up, follow-up. HCQ, hydroxychloroquine. LMWH, low-molecular weight heparin. MV, mechanical ventilation. MP, methylprednisolone. Hom, homozygous. IgAN, IgA nephropathy. NA, not available.

* The patient had a history of IgA nephropathy with chronic kidney disease (estimated glomerular filtration rate of 45 ml/min/1.73 m² and low-grade proteinuria (1 g/day).

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