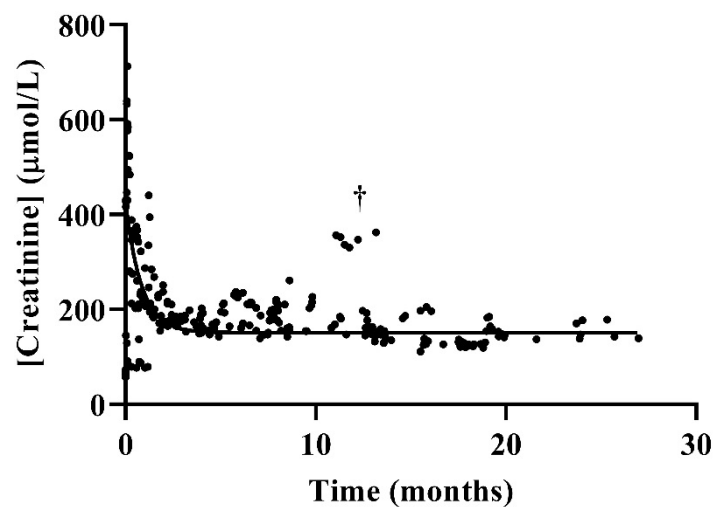


Article

A Uremic Goat Model Created by Subtotal Renal Artery Embolization and Gentamicin

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| Month | 0 | 9 | 13 | 16 | 27 |
|-------|---|---|----|----|----|
| N=* | 5 | 4 | 3 | 1 | 0 |

Figure S1. Creatinine plasma concentrations ($\mu\text{mol/L}$) during follow-up in $n = 5$ goats, excluding episodes of gentamicin-induced acute-on-chronic kidney injury. †In one goat, plasma creatinine stabilized at $\sim 350 \mu\text{mol/L}$ after a severe episode of gentamicin induced acute-on-chronic kidney injury. *Number of goats in study.

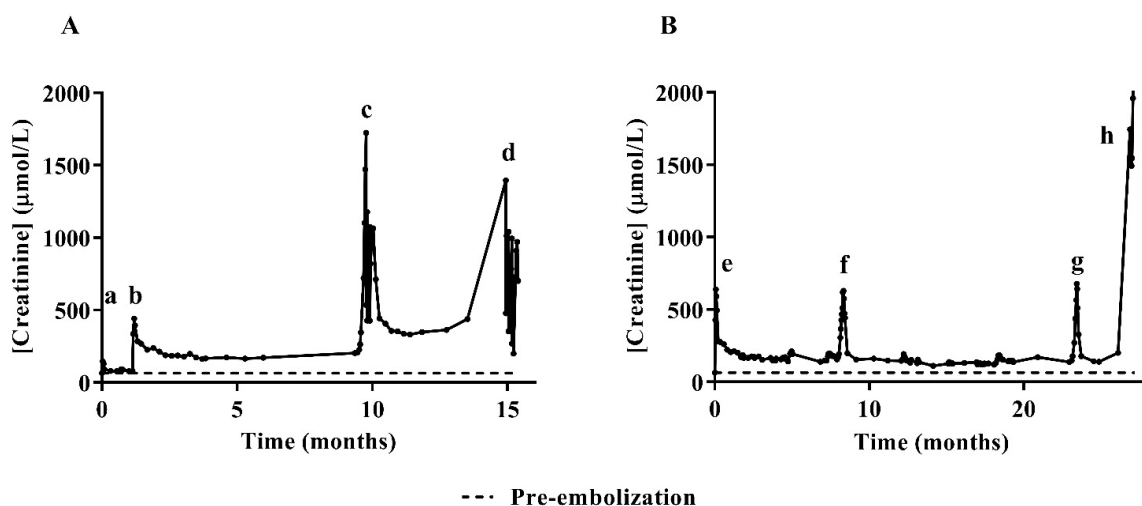


Figure S2. Creatinine plasma concentration-time profiles of $n = 2$ goats who were euthanized after 15 and 27 months of follow-up (A and B, resp.) because of unexplained severe acute-on-chronic kidney injury, which was not induced by gentamicin administration and did not recover spontaneously. a, first partial embolization; b, second partial embolization; c, gentamicin (10 mg/kg twice daily for 7 days) induced severe acute-on-chronic kidney requiring three intermittent HD sessions in five days; d, acute-on-chronic kidney injury treated with five intermittent HD sessions in nine days, followed by euthanasia in the absence of spontaneous recovery of kidney function; e, partial embolization; f-g, gentamicin (10 mg/kg twice daily for 7 days); h, euthanasia because of severe acute-on-chronic kidney injury.

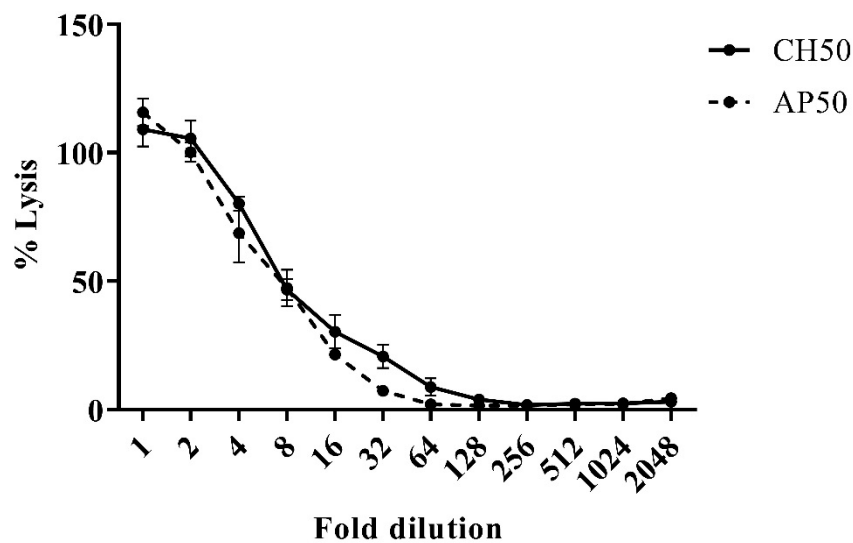


Figure S3. Activity of the classical (CH50) and alternative complement pathway (AP50). Complement-dependent lysis of erythrocytes was calculated as the percentage lysis relative to cells lysed in water (100% lysis) and cells incubated in buffer (0% lysis). Percentage lysis was plotted against serum dilution. The mean \pm standard deviation of three serum samples of two goats is presented.

Table S1. Gentamicin administration without an effect on urea, creatinine, phosphate and potassium plasma concentrations in goats ($n = 2$).

| Goat | Gentamicin dose | Time (days)* | Time C_{max} (days) [†] | Urea (mmol/L) | | Creatinine (μ mol/L) | | Phosphate (mmol/L) | | Potassium (mmol/L) | |
|------|-----------------|--------------|------------------------------------|---------------|-----------|---------------------------|-----------|--------------------|-----------|--------------------|-----------|
| | | | | C_{pre} | C_{max} | C_{pre} | C_{max} | C_{pre} | C_{max} | C_{pre} | C_{max} |
| 1 | 5 mg/kg 2d1 | 5 | 9 | 14.9 | 14.0 | 191 | 220 | 1.66 | 2.12 | 3.9 | 4.8 |
| 2 | 5 mg/kg 2d1 | 5 | - | 15.0 | 13.7 | 165 | 160 | 1.39 | - | 4.4 | 5.1 |
| 1 | 10 mg/kg 2d1 | 4 | 5 | 14.3 | 14.4 | 210 | 266 | 1.75 | 2.87 | 4.6 | 4.4 |
| 2 | 10 mg/kg 2d1 | 4 | 9 | 11.4 | 10.4 | 156 | 171 | 1.21 | - | 4.3 | 4.0 |
| 2 | 10 mg/kg 2d1 | 6 | 9 | 12.8 | 13.1 | 142 | 213 | 1.26 | - | 3.8 | 3.9 |
| 2 | 10 mg/kg 2d1 | 6 | 7 | 10.1 | 17.1 | 145 | 177 | 1.56 | 1.40 | 4.3 | 5.1 |
| 2 | 10 mg/kg 2d1 | 7 | 12 | 11.4 | 13.8 | 119 | 184 | 1.79 | 1.75 | 4.1 | 5.1 |
| 2 | 10 mg/kg 2d1 | 8 | 11 | 5.0 | 13.9 | 147 | 198 | 1.61 | 1.70 | 4.6 | 4.8 |

*Duration of gentamicin administration. [†]Time C_{max} , time to achieve maximum plasma concentration. [‡] C_{pre} vs C_{max} analyzed with a Wilcoxon matched-pairs signed rank test. C_{pre} , plasma concentration at day 1 prior to gentamicin administration; C_{max} , maximum plasma concentration after gentamicin administration.