

Supplemental text

Reasons of small-for-gestational-age

Presumed reasons of SGA were multiple gestations (n=27), preeclampsia (n=9), maternal hypertension (n=3), oligohydroamnios (n=3), fetal cardiovascular disease (n=2), intrauterine infection (n=1), and multiple congenital anomalies (n=1).

There was no meaningful difference in the frequency of medications, known to be associated with renal damage (such as ibuprofen, indometacin, antibiotics, and antifungal agents), between AGA and SGA infants (Fisher's exact test, $p > 0.05$).

Feeding protocol

Preterm infants were fed according to a local feeding protocol that was adapted by our neonatologist to meet the specific requirements of the individual patient. The initial volume of enteral feeding was 2 mL/kg of breast milk or preterm formula with a minimal absolute volume of 2 mL. Parenteral nutrition was supplemented with enteral feeding if needed. Parenteral nutrition was gradually tapered as enteral feeding volumes were increased and was usually stopped if an enteral feeding volume of 100 ml/kg/day was achieved. Fluid intake was stopped if a feeding volume of 120 ml/kg/day was achieved.

Renal size measurements with US.

Renal size measurements were performed using the posterior approach with patients in the prone or contralateral decubitus position. For infants on mechanical ventilation, images were obtained using the subcostal approach with patients in the supine or contralateral decubitus position. On coronal plane images, maximal renal lengths and the transverse diameter of each kidney were measured. On transverse plane images at the level of the renal hila,

anteroposterior (AP) diameters were measured. Each kidney size was measured 3 times and their mean values were recorded. To assess intraobserver agreement, intraclass correlation coefficients (ICCs) were calculated and were found to be high between the measurements (all, > 0.9, Supplemental Table 3). Kidney volumes were calculated using the equation of an ellipsoid: $\text{volume} = \text{mean length} * \text{mean AP diameter} * \text{mean transverse diameter} * 0.523$.

Supplemental Table 1. Demographic data according to gestational age.

GA (weeks)	Number of infants					Birth weight (median, g)		
	Total	Male	Female	AGA	SGA	Total	AGA	SGA
< 26	10	5	5	10	0	735	735	
26 - 27	8	4	4	6	2	833	855	710
28 - 29	21	12	9	17	4	980	1020	750
30 - 31	13	4	9	11	2	1490	1530	840
32 - 33	34	17	17	19	15	1710	1950	1380
34 - 35	32	17	15	23	9	2085	2160	1700
36 - 37	7	5	2	2	5	2470	3008	2160
Total	125	64	61	88	37			

Supplemental Table 2. Correlation between initial renal size parameters and GA, birth weight, height, and body surface area

	GA	Birth weight	Height	Body surface area
Length	0.725	0.809	0.760	0.816
AP diameter	0.657	0.776	0.704	0.772
Transverse diameter	0.662	0.755	0.673	0.753
Volume	0.705	0.850	0.758	0.841

Note. All numbers are Pearson correlation coefficients (all, $p < .0001$).

Supplemental Table 3. Intraobserver variability of renal size measurements

	intraclass correlation coefficients
Length, right	0.9874 (0.9833, 0.9906)
Length, left	0.9875 (0.9836, 0.9908)
AP diameter, right	0.9740 (0.9657, 0.9806)
AP diameter, left	0.9730 (0.9645, 0.9799)
Transverse diameter, right	0.9457 (0.9290, 0.9594)
Transverse diameter, left	0.9212 (0.8976, 0.9408)

Note. Numbers in parentheses are 95% CIs.