

Table 1. The distribution of demographic and clinical characteristics of the babies included in the study.

<i>Demographic characteristics</i>	<i>Mean ± SD</i>	<i>Min-maks</i>
Birth weight * (gr)	1219,2 ± 432,5	(550-2395)
Gestasiyonal age* (week)	29,0 ± 2,3	(23,4-32,3)
Maternal age, year*	30,3 ± 6,0	(18-42)
Hospital stay (days)	72,8±50,3	(18-235)
TPN taken day (days)	23,4±22,6	(7-128)
Gender (Boy / Girl) (%)	62,2 / 37,8	
Birth way(Vaginal / C/S) (%)	11,1 / 88,9	
Intrauterine growth	SGA, n (%)	4 (7)
	AGA, n (%)	35 (77)
	LGA, n (%)	6 (13)
Antenatal steroid, n (%)	39 (86,7)	

MV= Mechanical Ventilation, CPAP= Continous Pozitif Airway Pressure , TPN=Total Parenteral Nutrisyon,

* Values are given as mean standard deviation.

Table 2- Total parenteral nutrition and distribution of the contents given to the babies.

<i>Parenteral fluid contents (examined per kilogram)</i>	<i>Total TPN amounts Mean ± Standard Deviation</i>	
	During the 7th day*	During the 14th day *
Volume (ml/kg)	825,5 ± 119,9	1486,1 ± 432
Protein (gr/kg)	19,0 ± 5,3	33,9 ± 13,3
Lipid (gr/kg)	12,1 ± 3,9	20,7 ± 10,9
Dextroz (mg/kg)	57,6 ± 21,3	98,3± 41,7
Calcium (mg/kg)	350,8 ± 644,3	406,7 ± 132,2
Potassium (meq/kg)	5,7 ± 4,4	10,7 ± 5,6
Sodium (meq/kg)	14,5 ± 6,1	28,9 ± 16,3
Phosphorus (meq/kg)	84,4 ± 81,3	203,7 ± 163
Magnesium sulfate (mg/kg)	36 ± 55,5	114 ± 133,5
Vitalipid (cc/kg)	3,4 ± 2,5	7,3 ± 4,4
Soluvit (cc/kg)	3,4 ± 2,3	7,6 ± 4,5

* Total amount given to babies for 14 days *Total amount given to babies for 7 days

Table 3 – Factors of affecting plasma aluminum level

<i>Özellikler</i>		<i>Aluminum 0.day(μg/L)</i>	<i>Aluminum 14. day(μg/L)</i>	<i>Aluminum Increase Amount(μg/L)</i>	<i>P</i>
Gender	Boy	3,45 ± 1,56	4,59 ± 4,27	1,14 ± 4,47	0,303
	Girl	3,30 ± 1,85	4,92 ± 3,09	1,62 ± 3,52	
Gestastional age	≤26 GH	3,93 ± 2,90	7,45 ± 4,36	3,52 ± 5,85	0,272
	26-29 GH	3,55 ± 1,61	4,70 ± 2,83	1,15 ± 3,21	
	29-32 GH	3,14 ± 1,42	4,16 ± 3,35	1,02 ± 3,45	
Birth weight:	≤ 1000 gr	3,77 ± 2,26	6,38 ± 4,94	2,61 ± 5,45	0,653
	1000-2000gr	3,09 ± 1,42	3,85 ± 2,14	0,76 ± 2,57	
	>2000 gr	3,37 ± 0,39	4,49 ± 1,75	1,12 ± 2,13	
TPN receiving day	= 7 gün (n=5)	3,38 ± 0,80	3,86 ± 1,34	0,49 ± 2,06	0,609
	> 7 gün (n=38)	3,20 ± 1,54	4,99 ± 3,79	1,79 ± 3,94	
Ampicilin+ Amikacin	≤7 gün (n=27)	3,88 ± 1,91	5,16 ± 3,76	1,28 ± 4,03	0,643
	>7 gün (n=18)	2,56 ± 1,03	4,24 ± 3,20	1,68 ± 3,69	
Ampicilin+ Gentamicin	≤7 gün (n=28)	3,89 ± 1,88	5,04 ± 3,74	1,15 ± 4,01	0,386
	>7 gün (n=17)	2,46 ± 0,97	4,37 ± 3,25	1,91 ± 3,66	
Dobutamine	≤3 gün (n=43)	3,38 ± 1,76	4,77 ± 3,62	1,39 ± 3,94	-
	>3 gün (n=2)	2,68 ± 0,54	5,27 ± 0,09	2,59 ± 0,45	
Dopamine	≤3 gün (n=42)	3,41 ± 1,78	4,72 ± 3,65	1,31 ± 3,96	-
	>3 gün (n=3)	2,57 ± 0,43	5,83 ± 0,98	3,26 ± 1,22	
Furosemide	≤3 gün (n=43)	3,40 ± 1,76	4,73 ± 3,60	1,33 ± 3,91	-
	>3 gün (n=2)	2,32 ± 0,03	6,08 ± 1,24	3,76 ± 1,22	

* Serum aluminum increase amount = 14 days serum aluminum - aluminum level in cord blood

Table 4 - Relation between solutions and aluminum level in parenteral nutrition fluid.

	<i>Serum Aluminum level 14th day</i>		<i>Aluminum increase</i>	
	Rho	P	rho	P
Volume 7 days #	0,085	0,580	0,152	0,320
Protein 7 days#	-0,043	0,779	-0,128	0,402
Lipid 7 days#	-0,036	0,815	-0,043	0,77
Dextrose 7 days#	0,091	0,554	0,229	0,131
Calcium 7 days#	-0,302	<u>0,044</u>	-0,135	0,376
Potassium chloride 7 days #	-0,163	0,290	-0,118	0,444
Potassium phosphorus 7 days #	-0,002	0,989	-0,022	0,888
Serum sale 7 days #	-0,143	0,349	-0,057	0,708
Natrium phosphate 7 days #	0,116	0,449	0,101	0,509
Magnesium sulfate 7 days #	-0,294	<u>0,050</u>	-0,391	<u>0,008</u>
Volume 14 days *	0,169	0,266	0,201	0,185
Protein 14 days *	0,046	0,762	-0,018	0,904
Lipid 14 days*	0,157	0,303	0,064	0,674
Dextrose 14 days*	0,171	0,261	0,258	0,087
Calcium 14 days*	0,076	0,618	0,252	0,095
Potassium phosphate 14 days *	0,145	0,343	0,096	0,530
Natrium phosphate 14 days *	-0,058	0,707	0,032	0,832
Magnesium 14 days *	-0,169	0,267	-0,212	0,161

*14. Day serum aluminum - cord blood aluminum level # It is given as the total amount given per kg for 7 days. * It is given as the total amount given per kg for 14 days.