

Table 1 Characteristics of the participants who have information on child's scratch status either at 6 or 12 months (n = 140)

Variables	n (%)
Maternal race	
African American (AA)	30 (21.7)
European American or Other	108 (78.3)
Sex of the infant	
Male	70 (50.0)
Maternal smoking during pregnancy	8 (5.9)
Smoke 6 months after delivery	14 (10.6)
Smoke 12 months after delivery	15 (15.0)
History of parental allergy	
Asthma	
Mother	38 (27.7)
Father	35 (21.21)
Eczema	
Mother	12 (8.8)
Father	6 (4.1)
Rhinitis	
Mother	68 (49.6)
Father	77 (46.7)
Marital status	
Married	97 (71.9)
Other	1 (0.7)
Single but living together	16 (11.9)
Single	21 (15.6)
Pets 6 months after delivery	4 (3.0)
Pets 12 months after delivery	6 (5.9)
Season of child's birth	
Fall	30 (22.1)
Spring	30 (22.1)
Summer	30 (22.1)
Winter	46 (33.7)
Use of antibiotics during pregnancy	34 (19.1)
Vaginal/urinary infections during pregnancy ^a	60 (44.1)
Method of delivery	
Spontaneous vaginal delivery	32 (41.0)
After induction vaginal delivery	26 (33.3)
Cesarean section	20 (25.6)
Fish intake during pregnancy	6 (7.6)
Education	
Less than high school	11 (8.0)
Some college	33 (23.9)
College graduate	45 (32.6)
Graduate school	49 (35.5)
Tylenol intake during pregnancy	58 (41.4)
	Mean (n; 5, 95 %)
Maternal age during pregnancy	29.9 (131; 19.7, 39.0)
Gestational age (weeks)	38.6 (135; 35.0, 41.0)

^a Including urinary tract infection, vaginitis or vaginosis, genital warts, genital herpes, gonorrhea, syphilis, chlamydia, trichomoniasis, yeast infection, and group B *Streptococcus* infections

At 6 months of age 72.8 % of the mothers reported that they observed their child scratching in the last 6 months and 66.7 % at age 12 months covering the period from 7–12 months (Table 2). The prevalence of doctor's diagnosis of eczema was lower: 22.6 % at age 6 months and 25.5 % at 12 months.

In the first 6 months, any eczema at any location was reported by 33.8 % of the mothers, and in 35.3 % from month 7 to 12. Among specific eczema locations, cheek eczema was most prevalent. Also cradle cap was a prevalent skin symptom reported in children (29.9 %; $p < 0.05$). Regarding scratching, doctors diagnosis of eczema was not related to scratching in the first 6 months and weakly between 7 and 12 months (Table 3). Cradle cap showed the strongest association (25.0 %; $p < 0.05$). Between

Table 2 Scratching episodes and other skin manifestation observed by the mother in the first 6 months and from 7–12 months

	First 6 months, n = 136 (%)	7–12 months, n = 102 (%)
Scratching episodes	72.8	66.7
Doctor's diagnosis of eczema	22.6	25.5
Eczema-like symptoms	33.8	35.3
Cheek-eczema	22.1	18.6
Eczema on other sites of the head and body	24.3	16.7
Ear eczema	5.9	9.8
Swollen lips	1.5	0
Sore nappy-area	2.9	2.9
Cradle cap	21.3	16.7

Table 3 The associations of reported scratching with reported eczema diagnosis at ages 6 months

	Reported scratching in the first 6 months of age		Reported scratching from 7–12 months of age	
	Yes, n = 99 (%)	No, n = 37 (%)	Yes, n = 68 (%)	No, n = 34 (%)
Doctor's diagnosis of eczema	22.2	24.3	30.9 [#]	14.7
Eczema-like symptoms	35.4	29.7	41.2	23.5
Cheek eczema	23.3	18.9	23.5 [#]	8.8
Ear eczema	6.1	5.4	14.7*	0
Eczema on other sites	24.2	24.3	16.2	17.7
Cradle cap	29.9*	0	25.0*	0

* $p < 0.05$

[#] $p < 0.1$