

Supplemental Table. Estimated associations between anotia/microtia and selected maternal, paternal, and pregnancy-related characteristics by laterality and infant sex, National Birth Defects Prevention Study, 1997-2011

	aOR (95% CI) by laterality		aOR (95% CI) by infant sex	
	Unilateral (n=608)	Bilateral (n=88)	Male (n=400)	Female (n=299)
<i>Pregnancy characteristics</i>				
Infant sex				
Female	1	1		
Male	1.30 (1.10, 1.53)	1.17 (0.78, 1.78)	--	--
Plurality				
Singleton	1	1	1	1
Multifetal gestation	1.87 (1.29, 2.71)	0.38 (0.05, 2.71)	1.27 (0.73, 2.20)	2.22 (1.36, 3.62)
Gestational age at delivery				
<32 weeks, very preterm	2.78 (1.73, 4.47)	10.91 (5.31, 22.43)	2.97 (1.73, 5.12)	4.64 (2.52, 8.54)
32-36 weeks, preterm	2.18 (1.73, 2.74)	5.05 (3.14, 8.11)	1.91 (1.42, 2.59)	3.26 (2.42, 4.38)
≥37 weeks, term	1	1	1	1
<i>Maternal characteristics</i>				
Age at delivery ^a				
<25 years	0.96 (0.79, 1.16)	0.75 (0.46, 1.23)	0.94 (0.73, 1.19)	0.93 (0.71, 1.22)
25-34 years	1	1	1	1
>35 years	1.23 (0.96, 1.57)	1.02 (0.54, 1.92)	1.35 (1.01, 1.81)	1.02 (0.70, 1.48)
Race/ethnicity ^b				
White, non-Hispanic	1	1	1	1
Black, non-Hispanic	0.51 (0.32, 0.81)	0.89 (0.37, 2.12)	0.36 (0.19, 0.69)	0.87 (0.51, 1.49)
Hispanic	3.29 (2.65, 4.08)	2.65 (1.55, 4.53)	2.96 (2.26, 3.87)	3.52 (2.58, 4.79)
Other	1.80 (1.28, 2.53)	1.71 (0.74, 3.98)	1.89 (1.26, 2.84)	1.64 (0.98, 2.73)
Birthplace ^c				
US	1	1	1	1
non-US	1.33 (1.08, 1.63)	1.03 (0.60, 1.75)	1.29 (1.00, 1.68)	1.29 (0.96, 1.73)
Education level ^c				
<high school	1.07 (0.85, 1.36)	0.95 (0.77, 1.18)	1.10 (0.82, 1.48)	1.18 (0.85, 1.65)
high school	1	1	1	1
>high school	0.95 (0.77, 1.18)	0.95 (0.77, 1.18)	0.99 (0.76, 1.29)	0.90 (0.66, 1.22)
Number of prior live births				
0	1	1	1	1
1	1.11 (0.91, 1.35)	0.88 (0.53, 1.45)	1.17 (0.92, 1.50)	0.96 (0.72, 1.28)
2	1.04 (0.81, 1.32)	0.76 (0.41, 1.44)	0.99 (0.72, 1.34)	1.03 (0.74, 1.44)
≥3	1.17 (0.89, 1.53)	1.14 (0.60, 2.16)	1.20 (0.86, 1.67)	1.13 (0.77, 1.67)
Body mass index, kg/m ²				
<18.5, underweight	1.06 (0.71, 1.57)	0.24 (0.03, 1.75)	0.82 (0.48, 1.40)	1.15 (0.65, 2.02)
18.5-25, normal weight	1	1	1	1
25-30, overweight	1.09 (0.88, 1.36)	1.24 (0.74, 2.08)	1.06 (0.81, 1.38)	1.21 (0.89, 1.65)

>30, obese	1.34 (1.08, 1.67)	1.11 (0.62, 1.98)	1.33 (1.01, 1.74)	1.28 (0.93, 1.77)
History of diabetes ^c				
None	1	1	1	1
Type I	5.74 (2.74, 12.00)	47.76 (21.71, 105.0)	7.00 (2.91, 16.85)	13.61 (6.07, 30.55)
Type II	3.03 (1.45, 6.34)	19.32 (7.88, 47.38)	7.32 (3.27, 16.42)	2.89 (1.08, 7.75)
Gestational	1.12 (0.84, 1.50)	2.68 (1.49, 4.83)	1.06 (0.72, 1.54)	1.56 (1.07, 2.26)
History of asthma ^c				
No	1		1	
Yes	1.11 (0.40, 3.08)	NC	1.85 (0.65, 5.27)	NC
Folic acid supplementatior				
No use	1	1	1	1
Some use, but not daily	0.82 (0.67, 0.99)	0.76 (0.47, 1.23)	0.84 (0.66, 1.07)	0.77 (0.59, 1.02)
Daily use	0.61 (0.47, 0.79)	0.44 (0.22, 0.89)	0.84 (0.66, 1.07)	0.60 (0.41, 0.88)
Alcohol use ^c				
None	1	1	1	1
Drinking, but not binge	0.97 (0.78, 1.20)	0.97 (0.56, 1.68)	1.08 (0.83, 1.39)	0.82 (0.59, 1.13)
Binge drinking	0.95 (0.72, 1.25)	1.84 (1.06, 3.21)	1.16 (0.84, 1.61)	1.08 (0.83, 1.39)
Cigarette use ^c				
None	1	1	1	1
1-4 cigarettes/day	0.91 (0.59, 1.39)	0.99 (0.36, 2.72)	0.99 (0.59, 1.67)	0.87 (0.48, 1.58)
≥5 cigarettes/day	1.29 (0.96, 1.73)	1.25 (0.61, 2.55)	1.13 (0.79, 1.63)	1.51 (1.00, 2.30)
Substance abuse				
No	1	1	1	1
Yes	0.87 (0.59, 1.27)	1.69 (0.81, 3.51)	1.02 (0.66, 1.58)	0.89 (0.52, 1.55)
Daily caffeine intake ^c				
<10 mg	1	1	1	1
10-99 mg	0.88 (0.69, 1.13)	1.12 (0.60, 2.11)	0.86 (0.64, 1.17)	0.97 (0.69, 1.38)
100-199 mg	0.99 (0.77, 1.28)	1.07 (0.54, 2.14)	0.88 (0.63, 1.22)	1.18 (0.82, 1.70)
200-299 mg	0.99 (0.77, 1.28)	1.07 (0.54, 2.14)	1.06 (0.72, 1.55)	1.08 (0.69, 1.68)
>300 mg	1.13 (0.82, 1.57)	1.26 (0.54, 2.94)	1.16 (0.78, 1.73)	1.08 (0.66, 1.77)
<i>Paternal characteristics</i>				
Age at delivery ^d				
<25 years	0.78 (0.60, 1.02)	1.56 (0.79, 3.11)	0.85 (0.61, 1.18)	0.86 (0.63, 1.16)
25-34 years	1	1	1	1
>35 years	0.80 (0.63, 1.03)	1.66 (0.94, 2.94)	0.86 (0.63, 1.16)	0.94 (0.66, 1.33)
Race/ethnicity ^c				
White, non-Hispanic	1	1	1	1
Black, non-Hispanic	0.79 (0.42, 1.51)	2.31 (0.74, 7.15)	0.83 (0.38, 1.82)	1.21 (0.54, 2.75)
Hispanic	1.96 (1.40, 2.74)	3.26 (1.48, 7.18)	1.86 (1.24, 2.79)	2.48 (1.52, 4.04)
Other	1.51, (1.00 2.29)	0.95 (0.29, 3.13)	1.25 (0.75, 2.08)	1.79 (0.97, 3.29)
Birthplace ^b				

US	1	1	1	1
non-US	1.91 (1.50, 2.43)	2.15 (1.18, 3.91)	1.86 (1.37, 2.52)	1.98 (1.41, 2.79)
Education level ^e				
<high school	1.16 (0.92, 1.45)	1.27 (0.72, 2.25)	1.12 (0.84, 1.48)	1.26 (0.91, 1.73)
high school	1	1	1	1
>high school	0.86 (0.70, 1.07)	0.95 (0.56, 1.62)	0.84 (0.65, 1.09)	0.92 (0.67, 1.25)
Substance abuse				
No	1	1	1	1
Yes	1.03 (0.79, 1.35)	0.86 (0.41, 1.78)	1.09 (0.79, 1.50)	0.92 (0.62, 1.37)

aOR: adjusted odds ratio, CI: confidence interval, NC: not calculated, OR: odds ratio, US: United States

^a Multivariable models were adjusted for maternal age.

^b Multivariable models were adjusted for maternal birthplace.

^c Multivariable models were adjusted for maternal race/ethnicity.

^d Multivariable models were adjusted for maternal age and paternal education.

^e Multivariable models were adjusted for paternal race/ethnicity.