

## Letter to the Editor: Possible Metronidazole Teratogenicity and Clefting

### To the Editor:

The teratogenic and carcinogenic effects of metronidazole (Flagyl) have been controversial. Studies of teratogenicity, in particular, have not shown a significant increased risk of birth defects [Berget and Weber, 1972; Goldman, 1980; Peterson et al, 1966; Rodin and Hass, 1966; Royer, 1983]. However, Cantu and Garcia-Cruz [1982] reported two infants born with facial clefts after mothers were exposed to metronidazole in the sixth or seventh week of pregnancy for treatment of amebiasis. I recently saw a child who was born with a cleft of the hard and soft palate and optic atrophy. During her pregnancy, the mother had been treated for trichomoniasis with metronidazole twice daily for a 1 week period between the sixth and seventh weeks after the last menstrual period. She had also been prescribed Benedectin for nausea, which she took only on an as-needed basis. There is no family history of cleft lip/cleft palate, optic atrophy, or other birth defects. Additional positive findings on physical examination showed a hypoplastic, short philtrum and a Sydney crease on the left hand. Septooptic dysplasia was ruled out by CT scan, and chromosome studies showed a normal male pattern.

I am not sure whether or not this patient's cleft and optic atrophy are related to the metronidazole exposure. Because clefts are fairly common, this association might have occurred by chance. However, because there have been two previous cases of facial clefts associated with metronidazole exposure in the sixth to seventh week of pregnancy, I felt that this should be briefly reported. Though metronidazole might not be a strong teratogen, it might be associated with such defects if given to susceptible pregnancies at 6–7 weeks of gestation.

### REFERENCES

- Berget A, Weber T (1972): Metronidazole and pregnancy. *Ugeskr Laeger* 134:2085–2089.  
Cantu JM, Garcia-Cruz D (1982): Midline facial defect as a teratogenic affect of metronidazole. New York: Alan R. Liss, Inc., for The National Foundation—March of Dimes. BD:OAS18:85–88.  
Goldman P (1980): Metronidazole. *N Engl J Med* 303:1212–1218.  
Peterson WF, Stauch JE, Ryder CD (1966): Metronidazole in pregnancy. *Am J Obstet Gynecol* 94:343–349.  
Rodin P, Hass G (1966): Metronidazole and pregnancy. *Br J Vener Dis* 42:210–212.  
Royer, ME (1983): Innocuité du métronidazole (Flagyl) prescrit pendant la grossesse. *Méd Malad Infect* 13:727–729.

**Frank Greenberg**  
*Genetics Clinic*  
*Texas Children's Hospital*  
*Houston, TX 77030*

**Edited by James F. Reynolds**

Received for publication April 13, 1985; revision received June 21, 1985.

© 1985 Alan R. Liss, Inc.