



## First trimester exposure to piracetam: A report of four cases

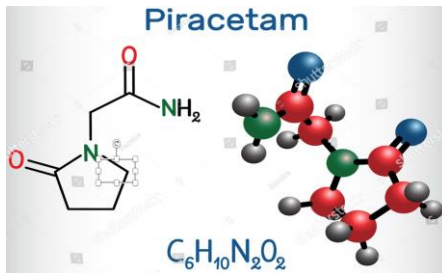
Deniz Karagülle<sup>1,2\*</sup>, Barış Karadas<sup>1,2</sup>, Ömer Demir<sup>2</sup>, İsmail Yılmaz<sup>1,2</sup>, Yusuf C. Kaplan<sup>2</sup>

<sup>1</sup> Izmir Kâtip Celebi University School of Medicine, Department of Pharmacology, Izmir, Turkey

<sup>2</sup> Terafar -Izmir Katip Celebi University Teratology Information, Training and Research Center, Izmir, Turkey

# Introduction:

Piracetam  
Exposure



4 Pregnant  
Women



Pregnancy  
Outcomes

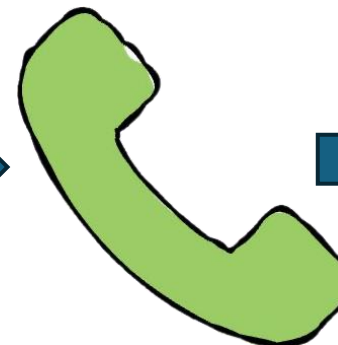
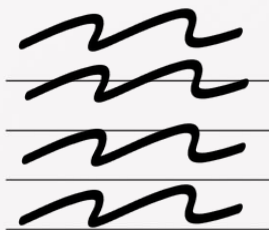


## Methods:

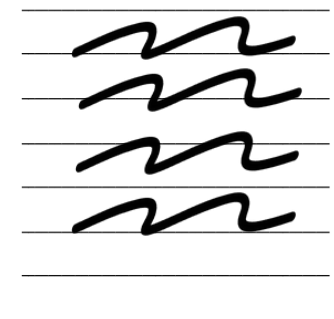
2013-2015-2020-2021



REGISTER AND  
CONSULTATION



RESULT



Case	Birth outcomes	Demographics	Exposure	Dose	Concomitant Medications	Co-morbidities
1	Neonatal death (intestinal non-fixation, sepsis)	36y Caucasian, G5P2. Male infant, spontaneous delivery, 36th GW.	3 days (GW 10–11)	800 mg/day PO ×3 days	Betahistine, antacids, trimebutine, PPI	Radiation (unk.); no FA; healthy; non-smoker; no alcohol/drugs
2	Termination at 12 GW (fetal distress)	26y, G4P2Y2K1	1 day (7 GW)	1 g/day IV	Clarithro, NSAIDs, cold meds, analgesics, GI agents	No FA; smoker; healthy; no alcohol/drugs
3	Healthy infant	32y Caucasian, C/S at 36 GW.	Chronic use, GW8 (exact days unknown)	200 mg/day ×2–3 years	Betahistine, Escitalopram	FA use (timing unk.); smoking/alcohol/radiation unknown.
4	Healthy infant	29y Caucasian, G2P1	1 day (5 GW)	3 × 1 g/5 ml IV	NSAIDs, antihistamines, Norethisterone, GI meds	FA use (timing unk.); smoking/alcohol/radiation unknown.

## Conclusions:

Current evidence does not establish a definitive association between piracetam and major congenital malformations.

Due to limited data and the malformation's high prevalence, the relationship remains speculative.

Despite limitations, this small case series may help clinicians counsel pregnant women inadvertently exposed to piracetam.

More robust evidence is needed to inform clinical decision-making around piracetam use in pregnancy.



For full text 

## References:

1. Al-Jedai, A. H., Balhareth, S. S., & Algain, R. A. (2012). Assessment of foetal risk associated with 93 non-US-FDA approved medications during pregnancy. *Saudi Pharmaceutical Journal*, 20(4), 287-299.
2. Practice Guideline From the AAN, AES, and SMFM, Pack, A. M., Oskoui, M., Roberson, S. W., Donley, D. K., French, J., ... & Keezer, M. R. (2025). Teratogenesis, Perinatal, and Neurodevelopmental Outcomes After In Utero Exposure to Antiseizure Medication. *Epilepsy Currents*, 15357597241258514.