

TOCOPHOBIA: IS IT BEING TREATED SURGICALLY?

Dubravko Habek

University Department of Obstetrics and Gynecology, University Hospital "Sveti Duh", Zagreb, Croatia
Catholic University of Croatia Zagreb, Academy of Medical Sciences of Croatia, Zagreb, Croatia

* * * * *

Over the past twenty years, a diagnosis of tocophobia has emerged as a widespread (non-obstetric psychiatric) indication for pregnancy completion by elective primary cesarean section (EPCS), which is increasing in some settings (Di Renzo 2003). Psychiatrists classify it under F40.2 as specific, appropriate phobias and, in some settings, increasingly indicate pregnancy completion by surgery. Risk factors for this modern and new diagnosis of the 21st century include older maternal age, higher socioeconomic status and depression, which accompanies certain environments and reproductive medicine of this time, especially in the urban western world (Räisänen et al. 2004). Toxophobia is defined by the fear for the outcome of pregnancy, that is, the fear for the outcome of vaginal birth, the fear of pain during childbirth according to the original translation. The fear of pain due to labor in the 21st century has no clinical basis because epidural analgesia, nitric oxide inhalation, intravenous analgesia with remifentanyl or petanthin and other methods are used. Pregnancy is a special condition that creates a natural fear of course and outcome, but correlates significantly with the personality and cognition of parenting, especially in primigravids who have not had experience with previous births, unlike maternity women who have had poor perinatal outcomes in previous pregnancies and have reason to fear, not just a concern (O'Connell et al. 2017, Demšar et al. 2018, Räisänen et al. 2004). But today, a significantly higher percentage of primigravidas with tocophobia who receive EPCS indicated by a psychiatrist are seen and often end up with normal delivery and avoid surgery after sufficient talk and clarification from an aging obstetrician. According to previous work, the range of diagnoses of tocophobia ranges from 1-43%, with an average of 14%, indicating the extreme diversity of midwifery, obstetric, psychiatric and socially emotional approaches to tocophobia (Mylonas & Friese 2015). Is it possible that the normal fear of surgery and anesthesia has disappeared in tocophobia? Is there a clinical psychological or psychiatric nomenclator for this paradoxical condition? Does tocophobia then become a surgical diagnosis because it is treated with surgery by laparohysterotomy? Does tocophobia after EPCS disappear and do not require the supervision of a psychiatrist in the puerperium? The defensive inert approach to obstetrics in recent years, interpreted in some settings by the high-risk profession due to medical implications, has allowed the silent spread of tocophobia and thus a "safe" birth by surgery under general

or regional anesthesia without a realistic indication of EPCS. However, performing surgeries and anesthesia procedures in forensic - ethical terms have a different category, because every surgery and anesthesia is a direct violation of physical and mental integrity (Habek et al. 2018).

It is impossible to argue the opposite, especially in cases of complications and deaths cited in the literature, such as the recent one where pregnant women due to tocophobia were treated with EPCS during which she suffered an acute subdural hematoma and subsequently died (Gioia et al. 2019). According to the FIGO (International Federation of Gynecology and Obstetrics), the non medical indicated EPCS is considered ethically unacceptable and does not benefit mothers and newborns (FIGO 1999), as most obstetricians consider from a forensic standpoint to perform unnecessary surgery (Candinas et al. 2014.). Pregnant women and non-obstetric doctors must be informed that EPCS impairs health and indicates iatrogenic chronic morbidity due to the absence of a periparturition modulation process (cardiovascular, metabolic - endocrinological, respiratory, gastrointestinal) and potential highly maternal and infant mortality (Mylonas & Friese 2015).

In the literature, under the term tocophobia, there are 16 works in the Pubmed database, and under the "fear of pregnancy and childbirth" about 1020 works. Recent work has interpreted that women who gave birth to EPCS in relation to vaginal delivery had more severe symptoms of somatization, obsessive compulsive disorder, anxiety, especially postpartum depression (Nerum et al. 2006, Dekel et al. 2019, Moamer et al. 2019, Šporčić et al. 2020). It is known that the so-called midwifery births have significantly fewer obstetric interventions, most studies recommend a supportive antenatal relationship of obstetricians and midwives with a tocophobic pregnant woman, and if necessary, psychiatrist treatment (Striebich et al. 2018). Medico-legal, tocophobia is a psychiatric diagnosis, obstetrics must not become altruistically populist and liberal, and obstetricians must not become "secrets performers" at the expense of the health of pregnant women and children. The enormous increase in EPCS is not a solution for the treatment of tocophobia, but it certainly requires greater joint involvement of psychiatrists and obstetricians in the diagnosis and treatment of true tocophobia by other non-surgically procedures, such as psychotherapy or psychopharmacological measures if necessary.

Acknowledgements: None.

Conflict of interest: None to declare.

References

1. Candinas D (Hrsg.): *Unnötige Operationen? Therap Umschau* 2014; 71:12
2. Dekel S, Ein-Dor T, Berman Z, Barsoumian IS, Agarwal S, Pitman RK: *Delivery mode is associated with maternal mental health following childbirth. Arch Womens Ment Health* 2019; 22:817-24
3. Demšar K, Svetina M, Verdenik I, Tul N, Blickstein I, Globovnik Velikonja V: *Tokophobia (fear of childbirth): prevalence and risk factors. J Perinat Med* 2018; 46:151-54
4. Di Renzo GC: *Tocophobia: a new indication for cesarean delivery? J Matern Fetal Neonatal Med* 2003; 13:217
5. Gioia S, Mirtella D, Lancia M, Suadoni F, Cingolani M: *Fatal Acute Intracranial Subdural Hematoma After Spinal Anesthesia for Cesarean Delivery: Case Report and Review of the Literature. Am J Forensic Med Pathol* 2019; 40:381-85
6. Habek D et al. (Eds): *Forensic gynecology and perinatology. Catholic University of Croatia and Medicinska naklada Publisher, Zagreb, 2018*
7. *International Federation of Gynecology and Obstetrics (FIGO): Ethical guidelines on human reproduction and women's health. Int J Gynecol Obst* 1999; 64:317-22
8. Moameri H, Ostadgheri M, Khatooni E, Doosti-Irani A: *Association of postpartum depression and cesarean section: A systematic review and meta-analysis. Clin Epidemiol Glob Health* 2019; 7:471-80
9. Mylonas I, Friese K: *Indications for and Risks of Elective Cesarean Section. Dtsch Arztebl Int* 2015; 112: 489-95
10. Nerum H, Halvorsen L, Sorlie T, Oian P: *Maternal request for cesarean section due to fear of birth: can it be changed through crisis-oriented counseling? Birth* 2006; 33:221-28
11. O'Connell MA, Leahy-Warren P, Khashan AS, Kenny LC, O'Neill SM: *Worldwide prevalence of tocophobia in pregnant women: systematic review and meta-analysis. Acta Obstet Gynecol Scand* 2017; 96:907-20
12. Räisänen S, Lehto SM, Nielsen HS, Gissler M, Kramer MR, Heinonen S: *Fear of childbirth in nulliparous and multiparous women: a population-based analysis of all singleton births in Finland in 1997-2010. BJOG* 2014; 121:965-70
13. Striebich S, Mattern E, Ayerle GM: *Support for pregnant women identified with fear of childbirth (FOC)/tokophobia - A systematic review of approaches and interventions. Midwifery* 2018; 61:97-115
14. Šporčić K, Čačić M, Reiner K, Pavlović M, Mihaljević S: *Caesarean section and the risk of postpartal depression; is there a possible role of heat shock proteins. Psych Danub* 2020 (in press)

Correspondence:

Prof. Dubravko Habek, MD, Msc, PhD
University Department of Obstetrics and Gynecology, University Hospital "Sveti Duh"
Sveti Duh 64, 10 000 Zagreb, Croatia
E-mail: dubravko.habek@os.t-com.hr