

Letter to the Editor: Administration of Antenatal Corticosteroids: Optimal Timing

Dear Editor.

we have read with great interest the review article by Berger et al., entitled "Administration of Antenatal Corticosteroids: Optimal Timing". First, we would like to congratulate the authors for raising this issue of great clinical significance. The widespread unnecessary use of antenatal corticosteroids (ACS) without clear evidence of imminent preterm birth has in the recent years come to the attention of the medical community. This was due to a combination of two findings. On the one hand, the fact that most women treated with ACS do not deliver within the time frame of 1 to 7 days that offers maximum effect. On the other hand, and most worrying, the accumulating evidence that ACS, as potent drugs, may exert adverse effects on the developing fetal brain, especially when they are allowed to act prematurely, away from delivery [1, 2, 3].

The World Association of Perinatal Medicine together with the Perinatal Medicine Foundation has identified the importance of guiding obstetricians on the justified and timely use of antenatal corticosteroids and the strict criteria for their use in cases of threatened preterm labor in two recently published comprehensive guidelines on these issues [4, 5].

In the guideline on the use of ACS, we underline their long-term adverse effects when administered in women that go on to deliver at term. Furthermore, we highlight the fact that ACS are useful especially up to 33+6 weeks and that their use in later gestations is less justified. Furthermore, we discourage the use of repeated doses and routine use before cesarean section at term.

In the guideline on management of preterm labor, we emphasize the strict criteria for defining established preterm labor and threatened preterm labor, taking under consideration the availability of resources in different settings.

We hope that these two guidelines will help clinicians refrain from the unnecessary use of ANC in the future. Furthermore, as stated in both guidelines, we encourage research that will help a more effective triage of cases with signs of preterm labor and we once more agree with the review that a better systematic audit on the appropriate use of ACS should be encouraged in all settings.

Conflict of Interest

The authors declare that they have no conflict of interest.

Authors

Themistoklis Dagklis¹, Cihat Sen²

Institutes

- Third Department of Obstetrics and Gynaecology, Faculty of Health Sciences, School of Medicine, Aristotle University of Thessaloniki, Thessaloniki, Greece
- 2 Department of Perinatal Medicine, Obstetrics and Gynecology, Istanbul University-Cerrahpasa, and Perinatal Medicine Foundation, Istanbul, Turkey

Correspondence

Themistoklis Dagklis

Third Department of Obstetrics and Gynaecology Faculty of Health Sciences, School of Medicine Aristotle University of Thessaloniki Konstantinoupoleos 49 54642 Thessaloniki Greece themistoklis.dagklis@gmail.com

References

Biedermann R, Schleussner E, Lauten A et al. Inadequate Timing Limits the Benefit of Antenatal Corticosteroids on Neonatal Outcome: Retrospective Analysis of a High-Risk Cohort of Preterm Infants in a Tertiary Center in Germany. Geburtshilfe Frauenheilkd 2022; 82: 317–325. DOI: 10.1055/a-1608-1 138



- [2] Räikkönen K, Gissler M, Tapiainen T et al. Associations Between Maternal Antenatal Corticosteroid Treatment and Psychological Developmental and Neurosensory Disorders in Children. JAMA Netw Open 2022; 5: e2228518. DOI: 10.1001/jamanetworkopen. 2022.28518
- [3] McGoldrick E, Stewart F, Parker R et al. Antenatal corticosteroids for accelerating fetal lung maturation for women at risk of preterm birth. Cochrane Database Syst Rev 2020(12): CD004454. DOI: 10.1002/14651 858.CD004454.pub4
- [4] Dagklis T, Sen C, Tsakiridis I et al. The use of antenatal corticosteroids for fetal maturation: clinical practice guideline by the WAPM-World Association of Perinatal Medicine and the PMF-Perinatal Medicine foundation. Perinatal Journal 2022; 30: 1–11. DOI: 10.2399/ prn.22.0301004
- [5] Dagklis T, Akolekar R, Villalain C et al. Management of preterm labor clinical practice guideline and recommendation by the WAPM-World Association of Perinatal Medicine and the PMF-Perinatal Medicine Foundation. Perinatal Journal 2023; 31: 164–177. DOI: 10.59215/prn.23.0313009

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