

EP07.16. Optic chiasm width: does the plane matter?

C Guerrero, N Domínguez, N Encabo, N Prat, M Illa, N Masoller, E Gratacós, E Eixarch, M Pérez-Cruz
BCNatal | Fetal Medicine Research Center (Hospital Clínic and Hospital Sant Joan de Déu), University of Barcelona, Barcelona, Spain.

Aim

To evaluate the concordance between fetal optic chiasm (OC) width in the axial and coronal planes.

Methods

226 NSG

Low risk pregnancies

20-39 weeks



OC width was obtained during the same ultrasound session in both the transabdominal axial plane (Alonso et al. 2019) and the transvaginal coronal plane (Viñals et al. 2016)

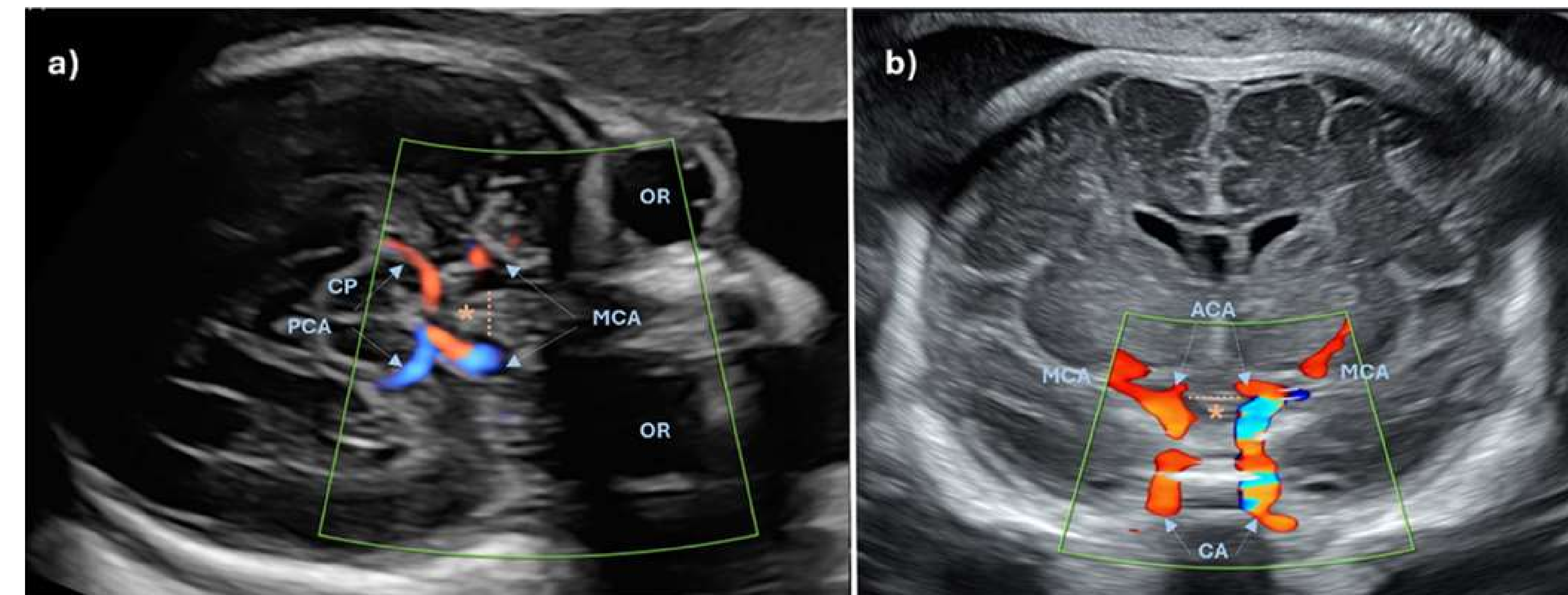


Figure1: OC width in 28-week fetus a) Transabdominal axial plane showing measurement of the OC (*) at level of cerebral peduncles (CP), orbit (OR) and the origin of middle cerebral artery (MCA) b) Transvaginal coronal plane showing measurement of OC (*) between the suprasellar portion of the carotid artery (CA) and below the anterior cerebral artery (ACA).

Results

Measurements obtained in axial and coronal planes demonstrated excellent concordance (ICC = 0.782, $p < 0.001$)

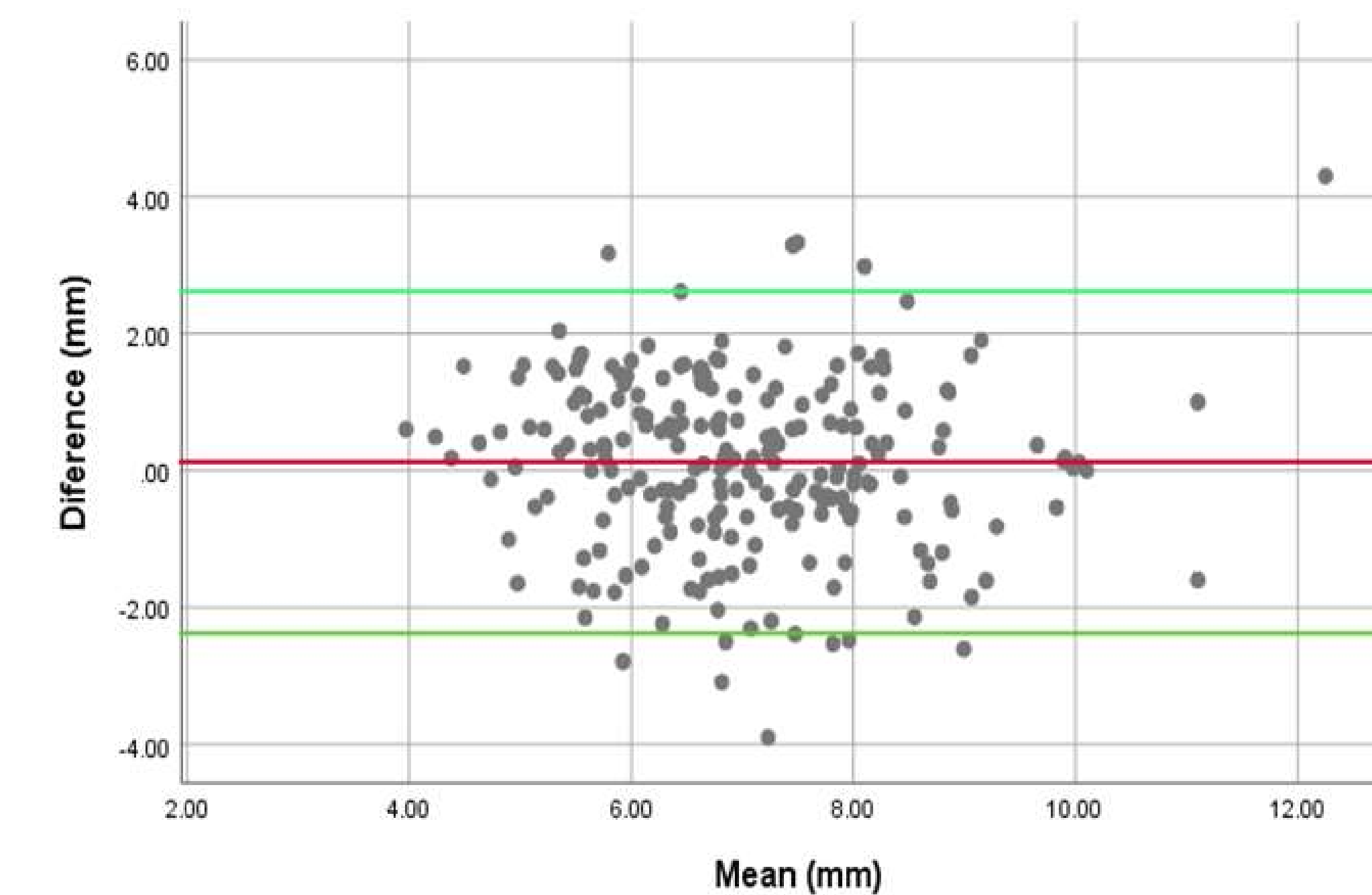


FIGURE 2: Bland-Altman plot of optic chiasm width in axial and coronal plane.

Conclusions

- These preliminary results show strong correspondence between optic chiasm width in axial and coronal plane.
- Optic chiasm evaluation can be performed interchangeably in both planes, being possible to select the most appropriate method based on their preferences or the individual characteristics of the patient.