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Aim

To compare anterior horn (AH) measurements in the axial and coronal planes.

Methods

344 NSG

Low risk pregnancies

20-39 weeks



AH measured in a) Transventricular axial plane b)Trans-frontal (TF) coronal plane c) Trans-thalamic (TT) coronal plane.



Conclusions

- AH measurements in the axial and coronal planes are not interchangeable. Specific axial cutoffs should be applied.
- AH measurements in the TF and TT coronal planes are very similar, suggesting that they could be interchangeable, which simplifies the measurement process in clinical practice.

Results

Mean AH measurements were higher in axial planes (Table 1). We found a low correlation and correspondence between AH in axial and coronal planes (Table 2) and moderate correlation and correspondence between coronal TF and TT planes (Figure 1)

Table 1. Mean AH measurements in the three different planes

AXIAL		CORONAL TF		CORONAL TT	
Proximal	Distal	Proximal	Distal	Proximal	Distal
1,96 (±0,6)	2,01 (±0,6)	1,72 (±0,9)*	1,66 (±0,7)*	1,68 (±0,7)*	1,69 (±0,9)*

Data expressed in mean ± SD.

Table 2. Correspondence and Correlation between Proximal and Distal AH measurements in both planes.

	Interclass	Spearman
Axial Proximal Coronal TF Proximal	0,27	0,30
Axial Proximal Coronal TT Proximal	0,19	0,24
Axial Distal Coronal TF Distal	0,29	0,36
Axial Distal Coronal TT Distal	0,29	0,31
Coronal TF Proximal Coronal TT Proximal	0,44	0,46
Coronal TF Distal Coronal TT Distal	0,55	0,51

Figure 1. Bland-Altman Plot: AH measurements agreement in TF and TT coronal planes.

