Falx flash - a tool to obtain valid mid-sagittal profiles in first trimester screening

Introduction
In first trimester screening an increasing number of quality and screening parameters have been established. The aim of the study was to evaluate the fulfillment of FMF London criteria in routine screening.

Methods
First trimester midsagittal images from the fetal head were retrospectively evaluated.
247 Examinations (around 9000 Images) were evaluated and one image of highest standard was selected from each. The selected images where tested if they met the chosen parameters.

Parameters used
- Zoom
- Neutral Position
- Maximum NT
- Caliper „on – on”
- Thin membrane
- Nasal bone
- Brain stem
- 4. Ventricle
- Cisterna magna
- Thalamus
- Falx Flash
- Zygomatic bone
- Maxilla

Results
The nuchal translucency was displayed in 100%, the caliper position was adequate ("on-on") in 93%, the fetal position in 85% neutral. The insonation angle was correct in 90%. The nasal bone was reliably assessable in 92% of the cases, the maxilla in 83%. In the posterior fossa the IV ventricle, the cisterna magna, the brainstem and the thalami were visualized (in 85%, 81%, 85%, 81%). In 80% the zygomatic bone was (accurately) not shown, Falx Flash was displayed in 70%.

If both criteria (zygomatic bone not visible and falx flash displayed) were fulfilled the assessability of the structures in the posterior fossa improved from 85% to 95%

Conclusion
Falx flash should be generally applied in first trimester screening

The Falx Flash concept was invented by David Jackson