

EP03.13 Risk stratification according to nuchal translucency thickness in singleton pregnancies

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Objective :

To evaluate whether increasing nuchal translucency (NT) thickness allows stratification of the risk of chromosomal abnormalities and adverse pregnancy outcomes.

Methods :

Retrospective longitudinal study was conducted over a 5-year period at Gynaecology and Obstetrics department B-Charles Nicolle Hospital, Tunis, Tunisia.

Singleton pregnancies with NT measurements above the 99th percentile and complete outcome data were investigated.

Included pregnancies were divided into 3 groups:

- ✓ group 1 (NT=2,6-3,5 mm),
- ✓ group 2 (NT=3,5-4,5 mm)
- ✓ and group 3 (NT≥4,5 mm). Demographic features, clinical characteristics, structural/chromosomal anomaly rates and perinatal outcomes were compared.

Results:

Baseline maternal characteristics were similar across groups.

The likelihood of normal ultrasound findings decreased progressively with increasing NT thickness (48.3%, 13.4%, and 9.2% in groups 1, 2, and 3, respectively; $p < 0.05$).

The rate of normal karyotype also declined significantly with increasing NT, reaching 39.2% in the ≥ 4.5 mm group ($p < 0.05$).

Adverse outcomes were more frequent in pregnancies with the highest NT measurements, including higher rates of miscarriage and pregnancy termination. Postnatal abnormalities were also significantly more common in the ≥ 4.5 mm group.

CONCLUSIONS

Increasing NT thickness provides useful risk stratification for chromosomal abnormalities and adverse pregnancy outcomes. Higher NT values are associated with progressively worse prognosis and require closer prenatal evaluation and counseling.