Impact of soft markers at fetal scan on early mother infant interactions and mother’s representations: Link between anxiety and depress level at third trimester and interactions perturbations
S. Vaux-Savelon a,∗, M. Dommergues b, O. Rosenblum a, E. Aidane a, N. Bodeau a, R. Feldman c, D. Cohen d
a Service de psychiatrie de l’enfant et de l’adolescent, hôpital Pitié-Salpêtrière, Paris, France
b Service de gynécologie obstétrique, GHU Pitié-Salpêtrière, Paris, France
c Gonda Brain Research and Psychology Department, Bar Ilan University, Tel Aviv, Israel
∗Corresponding author.

Background.— In up to 5% of pregnancies, ultrasound screening detects a foetal feature or “soft marker” (SM) that places the foetus at risk for a severe abnormality. In most cases, prenatal diagnostic work-up rules out a severe defect and, thus, SM constitutes, retrospectively, a false positive of ultrasound screening.

Objective.— To study the effects of false positive ultrasound screenings on maternal emotional status, maternal representations of the infant, and mother–infant interaction.

Design.— Prospective case control study. Participants: Utilizing an extreme-case design, we selected from a group of 244 women undergoing ultrasound: the study group consisted of 19 pregnant women whose foetuses had a positive SM ultrasound screening and a reassuring diagnostic work up. The controls were 19 women with negative ultrasound screening, matched for age and education.

Exclusion criteria included history of a medical or psychiatric disease or obstetrical complications, poor socio economic status, and single parenthood.

Outcomes measures.— In the third trimester of pregnancy, within 1 week after delivery, and 2 months postpartum, anxiety and depression were scored, and maternal representations were categorised using semi structured interviews. Maternal representations were scored as good (integrated/equlibrating), intermediate (reduced/loss involvement) and poor (non-integrated/ambivalent).

Mother–infant interactions were videotaped during feeding within 1 week after delivery and again at 2 months postpartum, then coded blindly using the Coding Interactive Behavior (CIB) scales.

Results.— Maternal anxiety and depression symptoms were significantly higher at all assessment points in the SM group. Maternal representations were also significantly different between SM and control groups at all study time (94% to 100% vs 5% to 11% of intermediate/poor representations, respectively). Perturbations to early mother–infant interactions were observed in the SM group and these dyads showed greater dysregulation, lower maternal sensitivity, and higher maternal intrusive behaviour. During interactions, SM infants displayed higher avoidance of their mothers. Multivariate analysis showed that maternal representation and depression at third trimester predicted mother–infant interaction.

Conclusion.— False positive ultrasound screenings for SM are not benign and negatively affect the developing maternal–infant attachment. Medical efforts should be directed to minimize as much as possible such false diagnoses.

High intellectual potential: strengths and weaknesses
T. Lubart
Laboratoire Lati (EA 4469), Université Paris Descartes, Institut de Psychologie, Paris, France

Creativity refers to the capacity to generate new ideas that meet contextual constraints. This original, adaptive thinking contrasts with traditional intellectual ability (measured by IQ and academic success). Creative giftedness is increasingly recognized as a distinct form of giftedness. The key psychological and environmental factors favoring creative giftedness will be examined. These include specific cognitive abilities (such as divergent-exploratory thinking, conceptual synthesis), personality traits (such as risk taking, openness), emotional characteristics (traits and states), and environmental conditions (family, school, regional levels). Creative potential develops in children and continues to evolve in adulthood. A method for measuring creative potential and its’ use for identifying and developing high creative potential (EPoC: Evaluation of Creative Potential Battery, Lubart et al., 2011) will be presented.