planned delivery in heroin-using mothers would reduce adverse outcomes.

STUDY DESIGN: A decision-analytic model was constructed using TreeAge software to compare planned delivery at 34, 35, 36, 37, 38, or 39 weeks of gestation. Outcomes included RDS, NICU stay, IUFD, infant death, cerebral palsy, and total quality-adjusted life years (QALYs). Probabilities and utilities for each outcome were derived from the literature. The optimal timing of delivery was that which achieved the best collection of outcomes and the greatest number of QALYs. Sensitivity analyses were used to vary model inputs to investigate the robustness of the model results.

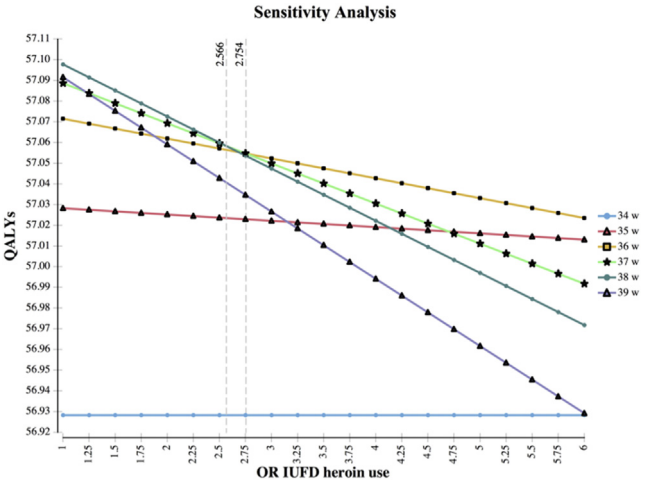
RESULTS: Delivery at 38 weeks was the optimal gestational age of delivery for heroin users. While the cases of CP, RDS, NICU admissions, neonatal deaths, and growth restriction decreased with each subsequent week, the numbers of IUFDs increased and the most intact perinatal survivors were achieved at 38 weeks gestation (Table). QALYs increased until 38 weeks gestational age and then declined at 39 weeks. A sensitivity analysis, which varied the odds ratio of IUFD in heroin users from the assumed baseline of 1.0 and above, found that delivery at 38 weeks gestation was optimal up to an OR of 2.6. Additionally, when the odds ratio was varied above baseline, delivery at gestational ages of 37 weeks (OR= 2.6-2.8) and 36 weeks (OR above 2.8) optimized total QALYs (Figure).

CONCLUSION: Delivery at 38 weeks gestation optimizes perinatal outcomes, total QALYs, and intact neonatal survivors in women who use heroin during pregnancy. These data suggest that planned delivery prior to 39 weeks gestation may improve outcomes in heroin users during pregnancy. A better understanding of the risk of IUFD will better guide the exact timing of delivery, as would identification of patient characteristics that adjust this risk.

Outcomes Associated with Delivery at Each Gestational Age. Theoretical Population of 20,000 based on amount of pregnant women exposed to heroin.

Outcome	34 weeks	35 weeks	36 weeks	37 weeks	38 weeks	39 weeks
IUFD	0*	2	6	13	16	21
Neonatal Death	74	53	44	33	31	31
RDS	1,179	773	472	305	293	291
NICU	17,040	13,068	11,121	9,900	9,860	9,735
CP	172	110	78	70	60	59
IUGR	0*	342	733	966	1,199	1,433
QALYs	1,138,566	1,140,565	1,141,430	1,141,773	1,141,955	1,141,830

* It was assumed that the population of interest was one that was at 34 weeks' gestation without an IUFD or an IUGR fetus at that point.



195 The recurrence of sonographic soft markers - ominous sign or just genetics

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OBJECTIVE: "Soft markers" (SM) are minor, nonspecific structural findings which might convey a statistical likelihood for Down Syndrome (DS). However, their implementation into clinical use is still under debate. In our current study we set out to determine the recurrence rate of the common SM in consecutive pregnancies.

STUDY DESIGN: This is a retrospective study of all women who underwent 1st or 2nd fetal sonographic anatomical screening at a private institution during the years of 1995-2016. All ultrasound screening examinations were performed by a single observer (M.B). The examined SM were pyelectasis, thickened nuchal fold (TNF) and intracardiac echogenic foci (EIF). All the affected cases were documented and compiled in a local database. Data on recurrence and pregnancy outcome was retrieved retrospectively.

RESULTS: 20,672 singleton pregnancies were included in our database. SM were detected in 2099 (9.84%) of the fetuses. Markers were found to be isolated in 80 % (1695) of the cases. The rate of EIF as a solitary finding was 6.5% (1360/20672) of pregnancies, the rate of solitary TNF was 3.3% (624/18850) and pyelectasis 1.7% (363/20672). Of the 283 pregnancies affected by EIF in their 1st pregnancy who performed ultrasound anatomy screening in their following pregnancy, 60 were diagnosed with repeated EIF (recurrence rate of 21%). The recurrence rate of TNF was 27% (47/168) and of pyelectasis was found to be 16% (18/113) with similar ratio between males and females. Overall, DS rate in our data was 1:525 pregnancies. No cases of DS were diagnosed in the patients with recurrent SM.

CONCLUSION: The high recurrence rate of solitary SM such as EIF, TNF and pyelectasis imply an autosomal recessive inheritance. These results, might improve our counseling for pregnant women affected by solitary SM re-appearance. Further studies must be performed in order to adjust the LR for SM if recurrence occurs.