



# Pregnancy outcome in women aged forty or more in comparison to women aged thirty-nine at a General Hospital in Australia

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## BACKGROUND

Advanced maternal age has long been associated with adverse perinatal outcomes. Obstetric complications include placental abruption, placenta praevia, low birth weight, preterm birth, postpartum haemorrhage and increased frequency of operative vaginal and caesarean deliveries.<sup>1</sup>

- There is also an increased risk of trisomy 21 and other chromosomal abnormalities.<sup>2</sup>
- During pregnancy, there is an increased risk of hypertensive disorders and gestational diabetes.<sup>3</sup>
- What is yet to be clearly established is the level of risk associated with advanced maternal age in women who are in good health with no risk factors.

## OBJECTIVES

To compare obstetric outcomes in women of advanced and very advanced maternal age to women aged 39 years.

## METHODS

A retrospective cohort study of 124 women was carried out over a two-year period. Obstetric and perinatal outcomes from women of advanced maternal age (n=73) and very advanced maternal age (n=5) were compared to women aged 39 years (n=46). Information regarding maternal demographics, pregnancy and neonatal outcomes was obtained from hospital medical records and patient discharge summaries.

## RESULTS

- Women in this study range in age from 39 to 49 years, with a mean age of 40.5 years
- Overall, women in this study were generally healthy and had no major pre-gestation medical problems
- There were 124 live born singletons and two sets of live born twins
- Advanced maternal age was more likely to return a high-risk prenatal screening result
- Women of advanced maternal age were more likely to be diagnosed with iron deficiency anemia in pregnancy
- Infants born to mothers of advanced and very advanced maternal age were statistically more likely to be of a lesser gestation, have a lower birth weight and have lower APGAR scores at delivery.

## CONCLUSION

The data suggests that regardless of age, the majority of pregnancies in this case series were free from significant morbidity and mortality and is reassuring for women who have good pre-gestation health.

## REFERENCES

- 1 Laopaiboon, M, Lumbiganon, P, Intarut, N, et al. Advanced maternal age and pregnancy outcomes: a multicountry assessment. *BJOG* 2014; 121: 49–56.
- 2 Pettit, KE, Hull, AD, Korty, L, et al. Noninvasive prenatal testing: a replacement for chorionic villus sampling and amniocentesis for advanced maternal age? *Obstet Gynecol* 2014; 123.
- 3 Van Katwijk, C, Peeters, L. Clinical aspects of pregnancy after the age of 35 years: a review of the literature. *Hum Reprod Update* 1998; 4: 185–194.