

Customised growth Charts and Monitoring of Fetal Growth

Small for gestational age (SGA), defined as a birthweight less than the tenth customised centile, is a strong marker of perinatal mortality risk. The NZ Perinatal and Maternal Review Committee Report for 2007 highlights the facts that 49% of stillbirths and 34% of neonatal deaths are associated with SGA. Moreover among SGA babies of 24 or more weeks gestation without congenital abnormality who die in 2007, the growth restriction was not detected prior to birth in at least 55% of stillbirths and 25% of neonatal deaths. Socioeconomic disadvantage, smoking and obesity all increase the risk of SGA and perinatal mortality so our South Auckland population is at high risk of these problems.

To improve the detection and management of SGA it is recommended strongly that customised growth charts be prepared and used for all women. These charts can be produced from the program for NZ downloaded from www.gestation.net. This website is also a good source of information on detection and management of pregnancies with SGA. It is recommended each woman has a copy of this chart in her pregnancy booklet so it is available to any health provider she sees including general practitioners, ultrasound providers, antenatal clinic and Assessment Labour and Birthing Unit staff.

LMCs should check the centiles for previous babies to help estimate risk in the index pregnancy. Fundal height measurements should be commenced and plotted from 24 weeks gestation. All women with a baby having suspected SGA should have ultrasound scanning arranged and be referred appropriately.

Obesity makes use of customised charts less reliable. Because of this it is probably reasonable to carry out routine growth ultrasounds for women with BMIs over 35. Although there is no good evidence for such an approach I suggest that these women be scanned at 32 and 36 weeks gestation and be referred if growth appears to be slowing. Recently the anaesthetists at Middlemore advised that they wish to see antenatally all women with BMIs over 45 and also wish to be notified when these women are admitted in labour.

References: 1. Perinatal and Maternal Mortality in New Zealand 2007. Third Report to the Minister of Health, July 2008 to June 2009
2. www.gestation.net

David Ansell
Clinical Lead
Antenatal Care
CMDHB