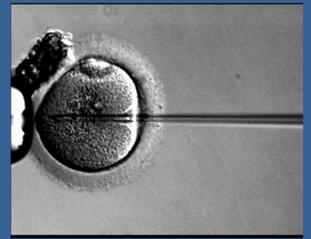


Postnatal Growth of Infants Born by Intracytoplasmic sperm injection (ICSI) Technique



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Introduction

Due to recent scientific progress in assisted reproductive techniques (ART), infertile couples can now become fertile.

Thus, a number of infants in our country are the results of these costly interventions.

This study has been undertaken to evaluate the physical growth of ART infants using standard growth charts from birth until 18 months of age

During the first 18 +/- 5 months postnatally linear growth was normal in the majority of infants with no significant change in the mean WtSDs, LSDS or HCSDS. (table and figure) .

At 18 months of age two infants had LSDS <-2, 8 infants had WtSDS <-2 and 2 infants had HCSDS <-2

Methods and Materials

We measured the anthropometric data of 100 infants newborns conceived through ART [intracytoplasmic sperm injection (ICSI) at HMC. A sequential sampling method in a period of 2 years was used.

Their birth size was assessed by measuring infants' weight, height and head circumference, and physical examination.

The weight for age SDS (WSDS), length SDS (LSDS) and head circumference SDS (HCSDS) were calculated with reference to normal standard for gestational age and sex of the newborn.

WHO growth charts (0: 2years) were used to assess these infants' growth during the study period.

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| Age | | Wt SDS | LSDS | HC SDS |
|-----------|------|--------|--------|--------|
| Birth | Mean | -0.85 | -0.23 | -0.36 |
| | SD | 0.98 | 0.91 | 0.77 |
| 18 months | Mean | -0.90 | -0.343 | -0.431 |
| | SD | 0.84 | 0.88 | 0.79 |

Results

At Birth , in comparison with normal growth standards for gestational age and gender:

1. the HCSDS was < 2SDS in 3/100 infants,
2. the LSDS was < -2 in 6/100 infants, and
3. WSDS was < -2 in 16 % of the infants.

Low birth weight (LBW) infants were twice more in the ART group compared to infants of normal population.

Conclusions

Infants born with ART have normal intrauterine growth appropriate for their gestation age.

Most of them grow normally during infancy period.

However, they are more susceptible to be underweight at birth and during infancy compared to normal infants.

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