

88.7% of cases were live births, 3.5% were still births and 7.8% were termination of pregnancy. Mean birth weight in the liveborn cases was 2462 ± 766 grams and median gestational age was 38 (35-39) weeks.

The cases were classified in three groups: 44.7% had isolated esophageal malformation, 31.6% were multiple malformed, 23.7% had an association or syndrome.

During the study period the prenatal detection rates increased.

There are large regional differences in the prevalence and in the prenatal detection rate.

After diagnosis of EA, it is important to evaluate the infant for associated malformations or syndromes, as these are present in more than half of all cases.

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HIGHER RATES OF BIRTH DEFECTS IN NEWBORNS AFTER ICSI PREGNANCY

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The Assisted Reproductive Techniques (ART) have become a routine infertility treatment. International data suggest the high rates of multiple pregnancies, prematurity, low birth-weight, neonatal morbidity/mortality in ART conceived births. Correlation between ART pregnancy and birth defects is not well established yet.

The aim of this study is to compare neonatal outcomes in ICSI-induced pregnancies vs IVF-induced pregnancies delivered at Rome's Gemelli Hospital.

We studied 322 infants conceived through assisted reproductive technology: 147 ICSI and 175 IVF. All newborns were evaluated for prenatal outcomes (maternal age, pregnancy complications) and neonatal outcomes (gestational age, birth-weight, major neonatal diseases, congenital malformations).

32.2% were singletons, 54.2% were twins and 14.6% were triplets.

No significant differences were observed in prenatal outcomes, gestational age (35 ± 2 vs 34 ± 3) birth-

weight (2325 ± 668 vs 2318 ± 759) and major neonatal diseases (34.01% vs 27.42%) compared ICSI/IVF groups. A significant higher rate of malformations in ICSI-group was observed (11.5% vs 5.1% $p < 0.03$): 7 cases of heart defects (4.7%), one case of SNC defect (anencephaly), three cases of clubfoot, three cases of urinogenital defects and three cases of syndrome (2 Down's syndrome and 1 Larsen's syndrome).

No differences we observed in singleton, twins and triplets comparing ICSI/IVF groups.

Our study suggests a significantly increased risk of congenital malformations in ART conceived births. The higher rate adverse neonatal outcomes and malformations in ICSI-group may be due to micromanipulation of gametes or unknown characteristics in the couples who undergo ICSI-treatment.

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DEVELOPMENT, BEHAVIOR PROBLEMS, AND HEALTH-RELATED QUALITY OF LIFE IN EIGHT-YEAR-OLD CHILDREN WITH DOWN SYNDROME

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Objective: Children with Down syndrome (DS) have delayed psychomotor development. We investigated levels of development, problem behavior, and health-related quality of life (HRQoL) in Dutch eight-year-old children with DS. Developmental outcomes were compared with normative data of eight-year-old children from the general population.

Methods: We enrolled 337 (~40% of the total population of) children with DS born in the Netherlands between 1992 and 1994 with DS. Developmental skills were determined by means of the McCarthy Scales of Children's Ability. To measure emotional and behavioral problems we used the Child Behavior Checklist. The HRQoL was assessed with the TNO-AZL Children's Quality of Life (TACQOL) questionnaire. Students' T-tests were applied to compare groups.

Results: Mean developmental age in boys with DS was 3.6 years (SD 0.85), in girls 4.2 years (SD 0.82) ($p < 0.001$). Mean developmental age was substantially lower than the mean calendar age

(for both boys and girls 8.1 years, SD 0.15). When compared with the general population, children with DS had more emotional and behavioral problems ($p < 0.001$), except for the anxious/depressed scale on which they scored more favorable ($p < 0.001$). Significantly lower HRQoL scores for the TACQOL scales gross motor skills, autonomy, social functioning and cognitive functioning were found (p -values < 0.001). Hardly any differences were found with regard to the scales physical complaints, positive and negative emotions.

Conclusions: Eight-year-old children with DS have an average developmental delay of four years, more emotional and behavioral problems, and a less favorable HRQoL compared to children from the general population.

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HIGH FREQUENCY OF LOW SEVERITY DISABILITIES IN VERY PREMATURE INFANTS AT AGE FIVE

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Background: Children born preterm run an increased risk of problems on multiple domains. The co-existence of these problems needs more attention.

Aim: To find out how many preterm born children have disabilities in comparison with term controls.

Methods: Children (N = 127) born at < 30 weeks GA or BW < 1000 g, born in our hospital, reaching the corrected age of 5 in a 18 month period were eligible. Healthy term born children, mostly recruited via the school of each preterm child, served as controls. Motor development was assessed using the M-ABC II, neurological functioning using the Touwen neurological examination, cognitive functioning (total, verbal and performat IQ, and processing speed quotient) using the WPPSI-III-NL, and behaviour using the SDQ. (parents and teachers). Scores > -1 SD below mean were defined as disability.

Results: 104 preterm born children (mean GA 28.8 weeks (SD 1.6), mean BW 1043 grams (SD 250)) and 91 term controls (mean GA 39.8 weeks (SD 1.8), mean BW 3224 (SD 528) participated. In the preterm group, 50% had one or more abnormal IQ score and 44% had minor neurological dysfunction, while 5% had CP. In the term controls this was 22%, 7% and 0% respectively. In the preterm group, 75% had ≥ 1 disability and 52% ≥ 2 disability and this was 27 resp. 10% in the term controls.

Conclusions: Of very premature children, able to undergo an age appropriate IQ test, only 25 % compared to 73% of term controls is without disability on all domains.

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PARENTAL EDUCATION DOES NOT INFLUENCE OUTCOME OF VERY PRETERM CHILDREN ON ALL DEVELOPMENTAL DOMAINS

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Background: Children born preterm run an increased risk of problems on multiple domains. It is not clear how SES influences these different outcomes.

Aims: To study the relation between parental education and multiple domain outcomes at age five in very preterm born children in comparison with term controls.

Methods: 104 children born < 30 weeks infants GA and/or < 1000 gr at birth and 95 term controls were assessed at the (corrected) age of five years. Motor, neurological cognitive (total, verbal and performat IQ, and processing speed quotient) and behavioural functioning were assessed using the M-ABC II, the Touwen examination, the WPPSI-III-NL, and the SDQ. (parents and teachers). The differences between preterm and term children were studied in three strata of parental education level (high, medium, low).

Results: The mean difference in IQ score between 104 preterm and 95 term children was 10 points.