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Presentacion Bibliografica

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Dr Sergio Ambiado.



INDISA - NEORED
Un Nuevo Concepto en Medicina Perinatal



Antenatally detected urinary tract dilatation: a 12–15-year follow-up

Herthelius M Axelsson R Lidefelt K

Pediatric Nephrology 2020 November

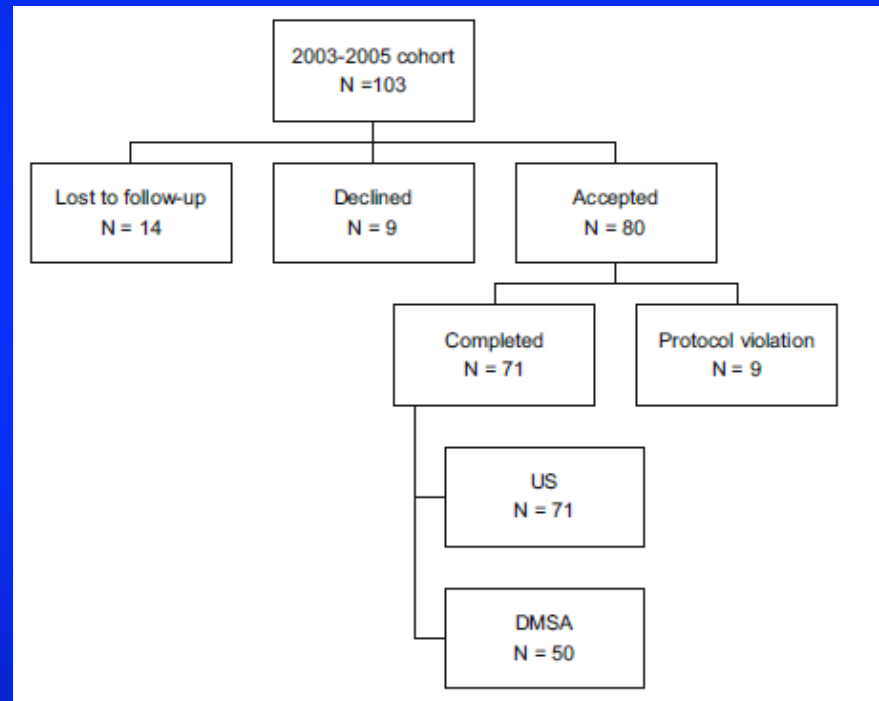
Método: Estocolmo Seguimiento de cohorte RN nacidos entre 2003–2005:

- con diagnóstico prenatal de Dilatación del Tracto Urinario ≥ 5 mm y
- consentimiento de participar en seguimiento por 12-15 años

- 14.000 embarazos 106 RN con pelvis ≥ 5 mm 0,7%
- Protocolo seguimiento; ecografía 5 días, 1-3-6-12 meses
- CUMS 8 meses y DMSA 2 años
- albuminuria, tasa filtración glomerular
- Se divide en 2 grupos
 - ≤ 7 mm, parénquima normal, sin dilatación ureter ni cálices
 - > 7 mm con dilatación ureter o cálices

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Table 1 Characteristics and outcome in subgroups A and B at the 12–15-year follow-up

| | Subgroup A | Subgroup B |
|--------------------------------------|-------------|-------------|
| Patients | 31 | 40 |
| Boys (%) | 21/31 (68%) | 31/40 (78%) |
| Mean age, years | 13.5 | 13.6 |
| eGFR < 90 mL/min/1.73 m ² | 0/22 (0%) | 0/31 (0%) |
| Febrile UTI(s) after age 2 | 0/31 (0%) | 1/40 (2%) |
| US examination | | |
| APD > 10 mm | 0/31 (0%) | 6/40 (15%) |
| Parenchymal abnormalities | 0/31 (0%) | 5/40 (12%) |
| DMSA | | |
| DMSA pathology | 1/19 (5%) | 12/31 (39%) |

APD, anteroposterior diameter; DMSA, dimercaptosuccinic acid (scan); eGFR, estimated glomerular filtration rate; US, ultrasound; UTI, urinary tract infection

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Table 2 Ultrasound findings showing change over time in 71 children examined at 1 year and 12–15 years of age

| Ultrasound | | Subgroup A N = 31 | Subgroup B N = 40 | Total N = 71 |
|------------|-----------------|----------------------|----------------------|-----------------|
| 1 year | 12– 15 years | | | |
| Normal | → Normal | 31 | 23 | 54 |
| Abnormal | → Normal | 0 | 6 | 6 |
| Abnormal | → Abnormal | 0 | 9 | 9 |
| Normal | → Abnormal | 0 | 2 | 2 |

N, number of patients examined

Normal = normal kidney parenchyma, no calyceal dilatation or dilatation of the kidney pelvis or ureters, and normal bladder appearance. Abnormal = other findings

Arrows indicate change from one status to the other

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Table 3 Findings of the dimercaptosuccinic acid (DMSA) scans showing change over time in 50 children examined at 2 years and 12–15 years of age

| DMSA | | Subgroup A <i>N</i> = 19* | Subgroup B <i>N</i> = 31* | Total <i>N</i> = 50* |
|----------|-----------------|------------------------------|------------------------------|-------------------------|
| 2 years | 12– 15 years | | | |
| Normal | → Normal | 18 | 18 | 36 |
| Abnormal | → Normal | 0 | 1 | 1 |
| Abnormal | → Abnormal | 0 | 8 | 8 |
| Normal | → Abnormal | 1 | 4 | 5 |

N, number of patients examined

*Not all patients agreed to undergo a DMSA scan

Normal = no focal parenchymal uptake defects and a split kidney function of both kidneys within the 45–55% range. Abnormal = other findings

Arrows indicate change from one status to the other

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- Ninguno tuvo alteraciones de tasa de filtración glomerular
- Sólo 1 RN de grupo > 7 mm tuvo ITU

Mechanical stimulation is a risk factor for phlebitis associated with peripherally inserted central venous catheter in neonates

Igarashi A et al. Pediatrics International 2020 October

- Manejo rutinario en PIIC incluía palpación en sitio de inserción , La palpación fue susoendida el 13 de Julio 2018 por alta incidencia de flebitis asociada a PIIC
- Fukui, Japon
- Objetivo : Demostrar que la rutina de palpación fue la causa de flebitis relacionada con PIIC
- Método: Estudio retrospectivo. Revisión incidencia de flebitis año 2018 en 2 períodos, antes y después de 13 Julio

Tables

Table 1 Clinical characteristics of the studied infants.

| Characteristic | All (n = 41) | Palpating group (n = 19) | Non-palpating group (n = 22) | P-value |
|---------------------------|------------------|-----------------------------|---------------------------------|---------|
| Gestational age (weeks) | 32.7 (22.9–41.9) | 32.7 (25.0–41.9) | 33.5 (22.9–40.9) | 0.574 |
| Birth weight (g) | 1707 (333–3440) | 1670 (725–3440) | 1772 (333–3150) | 0.651 |
| Male sex (%) | 63.4 (26/41) | 47.4 (9/19) | 77.3 (17/22) | 0.059 |
| Number of PICC insertions | 60 | 29 | 31 | |

Values are expressed as median (range) or frequency (n/N). PICC; peripherally inserted central venous catheter

Mechanical stimulation is a risk factor for phlebitis associated with peripherally inserted central venous catheter in neonates

Igarashi A et al. Pediatrics International 2020 October

Table 3 Incidences and causes of non-scheduled removal of the PICC

| | All (n = 60) | Palpating group (n = 29) | Non-palpating group (n = 31) | P-value |
|---|-----------------|-----------------------------|---------------------------------|---------|
| Non-scheduled removal of PICC (%) | 35.0 (21/60) | 41.4 (12/29) | 29.0 (9/31) | 0.418 |
| Complication resulting in non-scheduled removal of PICC (%) | | | | |
| Phlebitis | 18.3 (11/60) | 34.5 (10/29) | 3.2 (1/31) | 0.002* |
| Occlusion | 11.7 (7/60) | 3.4 (1/29) | 19.4 (6/31) | 0.104 |
| InfectionCatheter-related bloodstream infection | 1.7 (1/60) | 0 (0/29) | 3.2 (1/31) | 1.000 |
| Leakage | 1.7 (1/60) | 3.4 (1/29) | 0 (0/31) | 0.483 |
| Others | 1.7 (1/60) | 0 (0/29) | 3.2 (1/31) | 1.000 |

* $P < 0.05$. Values are expressed as frequency (n/N). PICC, peripherally inserted central venous catheter

Pathophysiologic Origins of Brachial Plexus Injury

Johnson G Obstet Gynecol 2020;136:725-730

- Estudio retrospectivo corte RN con injuria plexo braquial años 2012-2019, Houston, Texas
- Se evalúa presencia de distocia de posición y persistencia de lesión braquial

Pathophysiologic Origins of Brachial Plexus Injury

Johnson G Obstet Gynecol 2020;136:725-730

Table 1. Shoulder Dystocia and Brachial Plexus Palsy

| Year | Vaginal Deliveries | Shoulder Dystocia | Brachial Plexus Injury | Cesarean Deliveries | Shoulder Dystocia | Brachial Plexus Injury | Total Deliveries | Shoulder Dystocia | Brachial Plexus Injury | Brachial Plexus Injury/Shoulder Dystocia |
|------------|--------------------|-------------------|------------------------|---------------------|-------------------|------------------------|------------------|-------------------|------------------------|--|
| 2012 | 2,076 | 28 (1.3) | 3 (0.14) | 1,231 | 0 | 0 | 3,307 | 28 (0.85) | 3 (0.09) | 3/28 (10.7) |
| 2013 | 3,211 | 66 (2.1) | 0 (0) | 1,856 | 0 | 0 | 5,067 | 66 (1.3) | 0 | 0 |
| 2014 | 3,582 | 74 (2.1) | 4 (0.11) | 1,978 | 0 | 1 (0.05) | 5,560 | 74 (1.3) | 5 (0.09) | 5/74 (6.8) |
| 2015 | 3,919 | 61 (1.6) | 6 (0.15) | 2,168 | 2 (0.09) | 0 | 6,087 | 63 (1.0) | 6 (0.10) | 6/63 (9.5) |
| 2016 | 3,552 | 76 (2.1) | 5 (0.14) | 2,307 | 4 (0.17) | 1 (0.04) | 5,859 | 80 (1.4) | 6 (0.10) | 6/80 (7.5) |
| 2017 | 3,595 | 70 (1.9) | 2 (0.06) | 2,040 | 1 (0.05) | 0 | 5,635 | 71 (1.3) | 2 (0.04) | 2/71 (2.8) |
| 2018 | 3,962 | 101 (2.5) | 7 (0.18) | 2,437 | 2 (0.08) | 1 (0.04) | 6,399 | 103 (1.6) | 8 (0.13) | 8/103 (7.8) |
| 2019 | 2,266 | 62 (2.7) | 3 (0.13) | 1,345 | 0 | 0 | 3,611 | 62 (1.7) | 3 (0.08) | 3/62 (4.8) |
| Total | 26,163 | 538 (2.1) | 30 (0.11) | 15,362 | 9 (0.06) | 3 (0.02) | 41,525 | 547 (1.3) | 33 (0.08) | 33/547 (6.0) |
| <i>P</i> * | | | 0.31 | | | 0.76 | | | 0.32 | 0.84 |

Data are n, n (%), or n/N (%).

* Chi-square test for trend.

Pathophysiologic Origins of Brachial Plexus Injury

Johnson G Obstet Gynecol 2020;136:725-730

Table 2. Thirty-Three Neonates With Brachial Plexus Impairment Stratified by Presence of Shoulder Dystocia at Delivery

| | Shoulder Dystocia (n=19) | No Shoulder Dystocia (n=14) | <i>P</i> |
|---|--------------------------|-----------------------------|----------|
| Maternal factors | | | |
| Maternal age (y) | 30.5±7 | 29.0±5 | .53 |
| BMI (kg/m ²) | 36±7 | 35±8 | .62 |
| Diabetes* | 6 | 0 | .03 |
| Obstetric factors | | | |
| Gestational age (wk) | 39±2 | 38±3 | .43 |
| Length of 2nd stage (min) | 53±55 | 103±96 | .08 |
| Use of oxytocin | 15 | 9 | .44 |
| Use of epidural | 10 | 11 | .16 |
| Experience of delivering physician or midwife (y) | 18.1±10.4 | 14.9±13.2 | .44 |
| Operative vaginal delivery† | 3 | 4 | .38 |
| Neonatal factors | | | |
| Birth weight (g) | 3,883±553 | 3,318±845 | .07 |
| Nuchal cord present | 6 | 2 | .43 |
| Persistent brachial plexus palsy | 17 | 10 | .36 |

Data are mean±SD or n unless otherwise specified.

* Five of six patients had gestational diabetes.

† Five vacuum, two forceps.

Association of Obesity With Maternal and Cord Blood Penicillin Levels
in Women With Group B Streptococcus Colonization

**Association of Obesity With Maternal and
Cord Blood Penicillin Levels in Women With
Group B Streptococcus Colonization**

Association of Obesity With Maternal and Cord Blood Penicillin Levels in Women With Group B Streptococcus Colonization

Mc Coy J Obstet Gynecol 2020;136:756-64

Table 2. Penicillin Concentration Results

| Result | Obese Group (n=25) | Nonobese Group (n=24) | P |
|--|--------------------|-----------------------|------|
| Maternal penicillin concentration (micrograms/mL) | 4.2 (3.1–6.7) | 4.0 (2.8–5.6) | .58 |
| Time from prior penicillin dose to blood draw (h) | 4.0 (3.8–4.4) | 4.1 (3.9–4.2) | .54 |
| Cord blood penicillin concentration (micrograms/mL) | 2.7 (1.0–5.1) | 6.7 (5.0–15.1) | <.01 |
| Cord blood penicillin concentration by quartile (micrograms/mL) | | | <.01 |
| 1 (0.42–2.4) | 11 (46) | 1 (4) | |
| 2 (2.5–5.1) | 7 (29) | 5 (20) | |
| 3 (5.2–8.9) | 4 (17) | 8 (32) | |
| 4 (9–30.46) | 2 (8) | 11 (44) | |
| Time from start of penicillin to delivery (h) | 15.9 (11.3–19.6) | 12.8 (10.7–17.0) | .27 |
| Time from last penicillin dose to delivery (h) | 2.9 (1.7–4.0) | 1.7 (1.2–3.0) | .07 |
| Time from last penicillin dose to delivery by quartile (h) | | | .31 |
| 1 (0.44–1.35) | 4 (16) | 9 (38) | |
| 2 (1.38–2.4) | 6 (24) | 6 (25) | |
| 3 (2.5–3.8) | 7 (28) | 5 (21) | |
| 4 (3.85–9.5) | 8 (32) | 4 (17) | |
| Comparison of cord blood penicillin concentrations by quartile of time from last penicillin dose to delivery (h) | | | |
| 1 (0.44–1.35) | 6.0 (2.3–9.5) | 12.9 (6.0–16.0) | .09 |
| 2 (1.38–2.4) | 5.3 (4.8–7.0) | 9.2 (6.7–18.6) | .14 |
| 3 (2.5–3.8) | 1.8 (0.8–4.9) | 5.7 (5.5–6.5) | .06 |
| 4 (3.85–9.5) | 2.1 (0.8–2.8) | 3.3 (1.2–5.0) | .22 |

Data are median (interquartile range) or n (%) unless otherwise specified.

Association of Obesity With Maternal and Cord Blood Penicillin Levels in Women With Group B Streptococcus Colonization

Mc Coy J Obstet Gynecol 2020;136:756-64

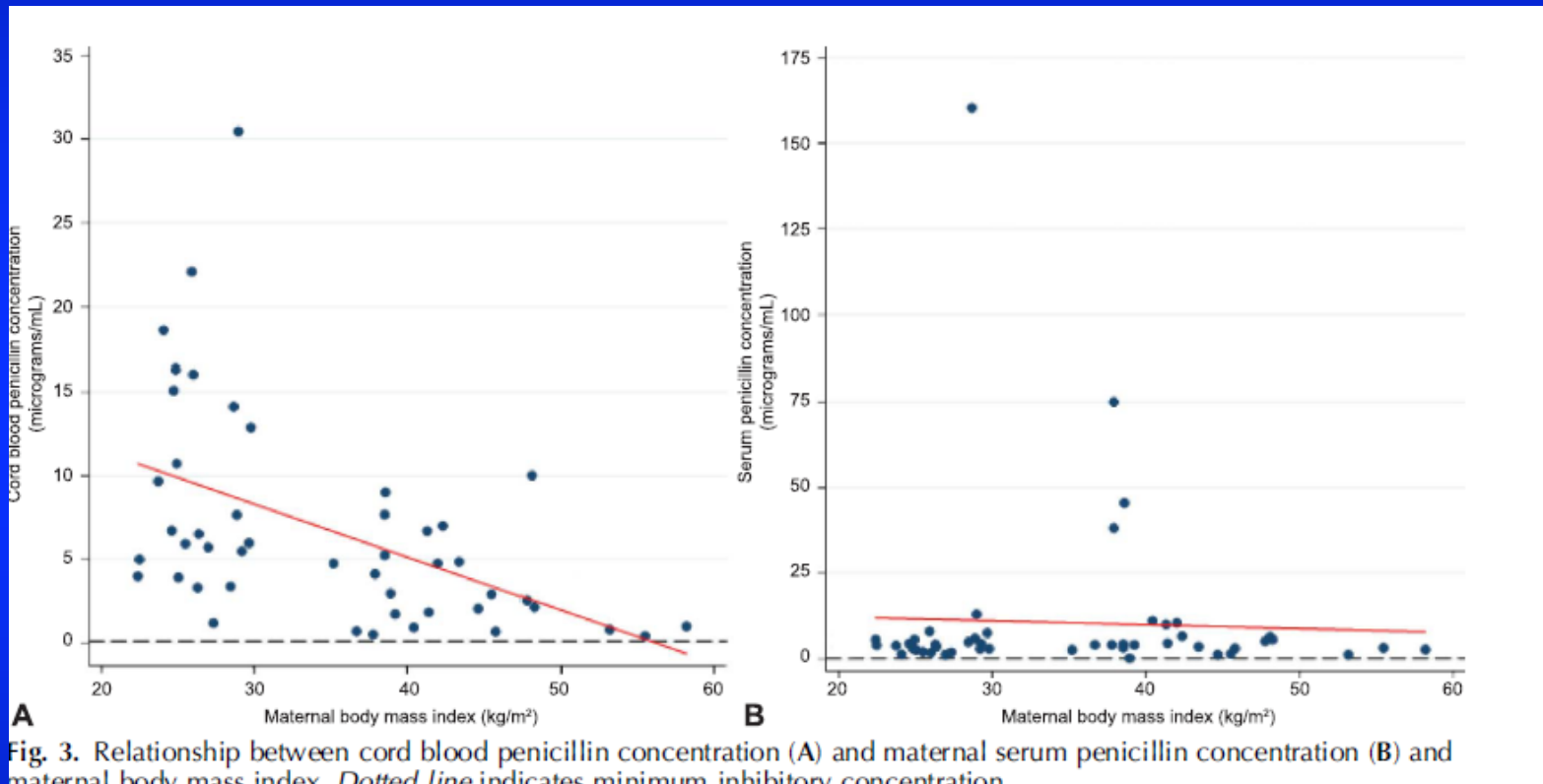


Fig. 3. Relationship between cord blood penicillin concentration (A) and maternal serum penicillin concentration (B) and maternal body mass index. Dotted line indicates minimum inhibitory concentration.

Long Term Core Outcome of Patients With Simple Gastroschisis J Pediatr Surg 2020 October

- Estudio retrospectivo
- Gastrosquisis simple; sin atresia, ECN, vólvulo, síndrome compartamental
- Pennsylvania, 2008-2016
- Análisis historia y encuesta 2-5-12 años

Long Term Core Outcome of Patients With Simple Gastroschisis J Pediatr Surg 2020 October

Table 1
Demographic data.

| Variables | All patients (n = 124) | Surveyed patients (n = 35) | Nonsurveyed patients (n = 89) | P |
|---------------------------------|------------------------|----------------------------|-------------------------------|--------|
| Prenatal diagnosis | 96.8% (120/124) | 94.3% (33/35) | 97.8% (87/89) | 0.316 |
| Vaginal delivery | 50% (62/124) | 60% (21/35) | 46.1% (41/89) | 0.231 |
| C-section | 50% (62/124) | 40% (14/35) | 53.9% (48/89) | 0.165 |
| Female gender | 58.1% (72/124) | 54.3% (19/35) | 59.6% (53/89) | 0.687 |
| GA at birth (weeks/days) | 36/3 (27/6–38/0) | 36/4 (31/4–38/0) | 36/3 (27/6–38/0) | 0.650 |
| Premature birth (<37 weeks GA) | 76.5% (83/124) | 65.7% (23/35) | 73.7% (65/88) | 0.383 |
| Birth weight (g) | 2440 (940–3671) | 2325 (1320–3220) | 2465 (940–3671) | 0.511 |
| Small for GA (<10th percentile) | 27.3% | 24.2% | 28.8% | 0.814 |
| APGAR scores at 5 min | 9 (3–9) | 9 (7–9) | 9 (3–9) | 0.790 |
| Primary reduction | 29.8% (37/124) | 31.4% (11/35) | 29.2% (26/89) | 0.830 |
| Age at fascial closure (days) | 9 (3–26) | 9 (4–26) | 9 (3–19) | 0.713 |
| Length of follow up (years) | 4.0 (0.1–11.0) | 6.1 (3.5 = 11.0) | 3.2 (0.1–10.2) | <0.001 |

No differences were observed between the group of patients whose parents were reached for the phone survey versus those whose parents were not reached. Continuous variables are expressed as median (range). GA: gestational age.

Long Term Core Outcome of Patients With Simple Gastroschisis J Pediatr Surg 2020 October

Table 2

Short-term core outcomes, observed during the neonatal admission and at the time of neonatal discharge.

| Variable | |
|--|--------------------|
| Neonatal mortality | 0.0% (0/124) |
| Time on PN (days) | 29 (12–101) |
| Blood culture-proven sepsis | 4.0% (5/124) |
| Central line thrombosis | 3.2% (4/124) |
| Wound infections | 1.6% (2/124) |
| Persistent cholestasis | 0.0% (0/124) |
| Weight at discharge (z-scores) | −2.25 (−4.5–1.42) |
| Height at discharge (z-scores) | −2.76 (−9.34–1.80) |
| Head circumference at discharge (z-scores) | −2.19 (−5.02–1.36) |
| Feeding tube at discharge | 10.4% (13/124) |
| Antireflux medications at discharge | 33.9% (42/124) |
| Anticonstipation medication at discharge | 3.2% (4/124) |

Long Term Core Outcome of Patients With Simple Gastroschisis

J Pediatr Surg 2020 October

Table 3

Long-term outcomes.

| Variable | |
|---|----------------|
| Mortality | 0.0% (0/123) |
| Abdominal pathology requiring therapy | |
| GERD | 34.1% (42/123) |
| Constipation | 32.5% (40/123) |
| Incontinence | 4.1% (5/123) |
| Abdominal complications requiring surgery | |
| Small bowel obstruction | 3.3% (4/123) |
| Midgut volvulus | 0.8% (1/123) |
| Enterocolitis | 0.8% (1/123) |
| Gastroparesis | 0.8% (1/123) |
| GERD | 0.8% (1/123) |
| Umbilical hernia | 2.4% (3/123) |
| Inguinal hernia | 3.3% (4/123) |
| Neuroblastoma | 0.8% (1/123) |

Occurrence at any point after initial hospital discharge. One patient had no follow-up data available.

Long Term Core Outcome of Patients With Simple Gastroschisis J Pediatr Surg 2020 October

P. DE DIE, V. SWAMINATHAN, G. JOHNSON ET AL.

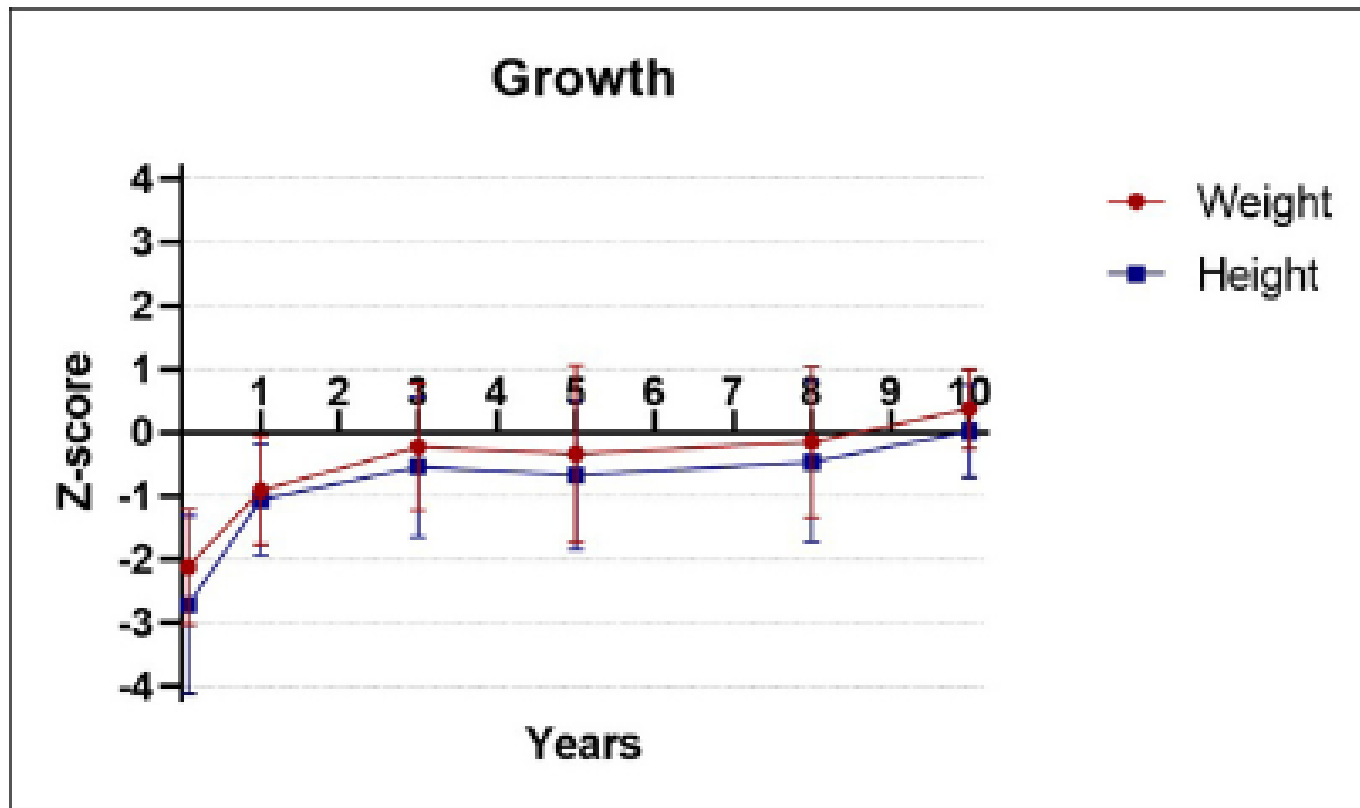


Fig. 1. Weight and height z-scores during follow-up.