

Case of Neonatal Hypoglycemia

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Dutch recommendation

Measure glucose

- 1-2 hours after birth
- Next with intervals 2-6 hours before a feeding
- Continue 24 hours when the child is SGA, other indications 12 hours
- Stop when 3 values above the 2.0 , and 2 of these > 2,6
- Refer to paediatrician when <1,9 and still <1,9 1 hour after

Laboratory test (POCT-glucosemeter)

LOINC 14749-6 Glucose [Moles/volume] in Serum or Plasma

	1-2 uur na geboorte	2-24 uur na geboorte	24-48 uur na geboorte
Streefwaarde	≥2.0 mmol/l	≥2.6 mmol/l	≥2.6 mmol/l
Interventiegrens	≤1.5 mmol/l	≤1.9 mmol/l	<2.6 mmol/l
		<2.6 mmol/l bij: *recidiverende waarden tussen 2.0 en 2.5 mmol/l *onvoldoende stijging op voorgaande interventies	

Tabel 1: Streefwaarde en interventiegrens bij verschillende uren postpartum bij pasgeborenen

Medication/ nutrients

Glucose gel

ATC V06DC01 [glucose](#)

*Dosing glucogel (uit protocol NWZ Alkmaar):

Glucogel® 40%: 200mg/kg lichaamsgewicht = 0,5 ml/kg lichaamsgewicht

• Geboortegewicht	<u>Glucogel</u> ® 40% in ml	Glucose in gram
> 2.0 – 2.5 kg	1.25 ml	0.5 gram
> 2.5 – 3.0 kg	1.50 ml	0.6 gram
> 3.0 – 3.5 kg	1.75 ml	0.7 gram
> 3.5 – 4.0 kg	2.00 ml	0.8 gram
> 4.0 – 4.5 kg	2.25 ml	0.9 gram
> 4.5 – 5.0 kg	2.50 ml	1.0 gram

Casus

First Pregnancy

Mother born on 1991 delivered (outcome of the pregnancy) a still birth at 24 weeks of pregnancy. The foetus had spina bifida.

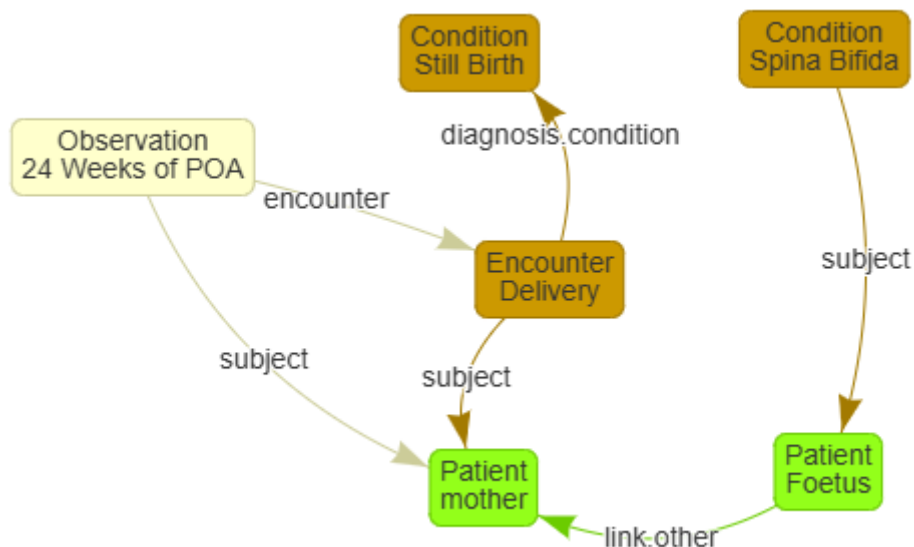


Table 1: FHIR JSON First Pregnancy Outcome

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Diagnosis of Gestational Diabetes Mellitus at Second Pregnancy

The second pregnancy was complicated by an abnormal high glucose / glucose two hours after meal 8 mmol/l.in LOINC at 22 weeks in LOINC. Glucose tolerance test revealed diagnosis diabetes mellitus. The woman was referred to a diabetes specialist who diagnosed gestational diabetes mellitus. Her blood sugar values were kept under control with diet.

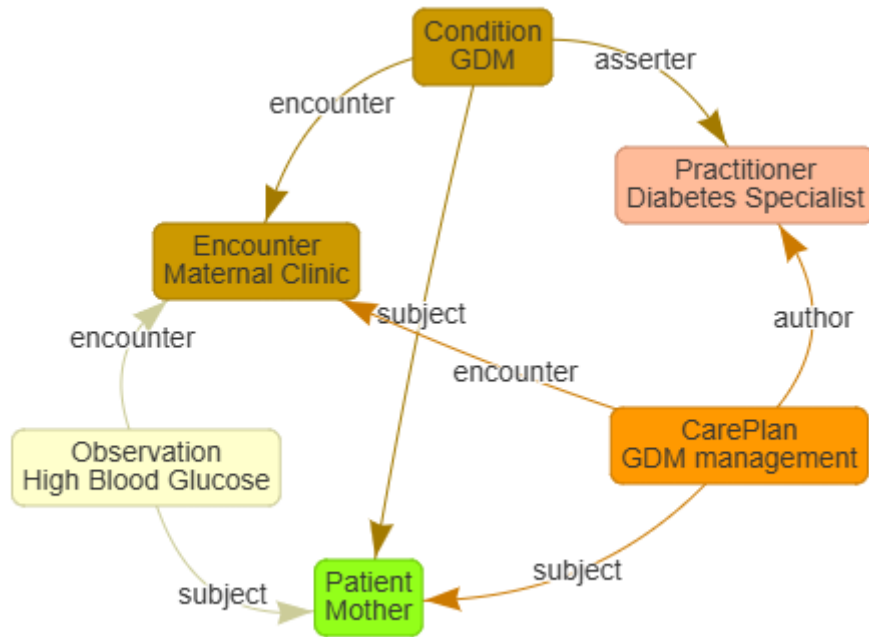


Table 2: FHIR JSON Bundle GDM Diagnosis

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Table 3: Terminology/ classification codes used

Post Prandial blood Glucose	LOINC	14761-1 - Glucose [Moles/volume] in Serum or Plasma --2 hours post meal
Gestational Diabetes Mellitus	ICO 10	O24.4 - Diabetes mellitus arising in pregnancy

Management of Neonatal Hypoglycaemia during immediate Post Partum

The child had a birthweight of 3,6 kg in LOINC. One hour after birth the newborn had a blood glucose of 1,4 mmol LOINC. The child was given 2,0 ml Glucose gel ATC V06DC01. 2 hours after birth the glucose was 2,1 LOINC

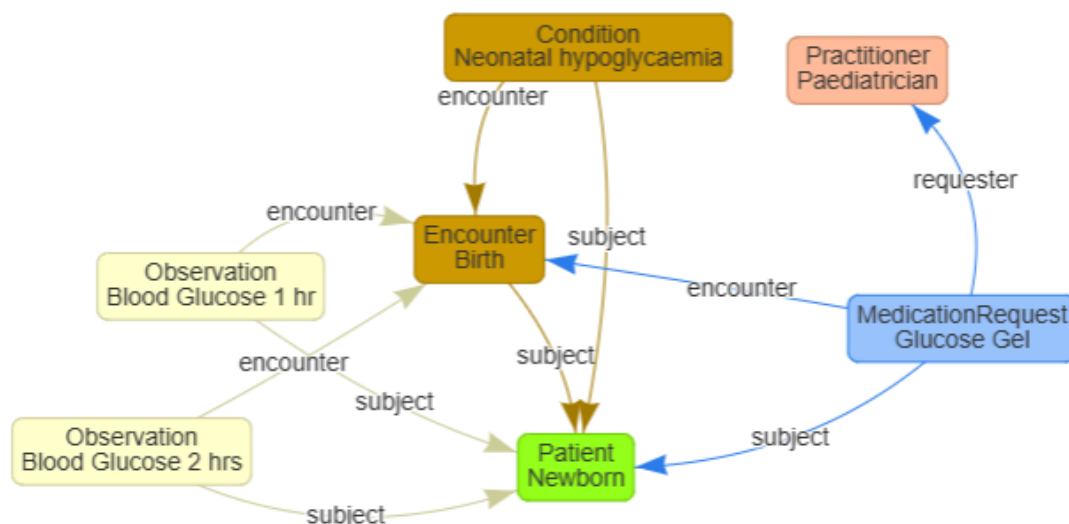


Table 4: Diagnosis and Management of Neonatal Hypoglycaemia I do not see the case illustrated , still about mother and fetal death

<pre> { "resourceType": "Bundle", "type": "collection", "entry": [{ "fullUrl": "http://clinfhir.com/fhir/Patient/cfsb1741477960761", "resource": { "resourceType": "Patient", "id": "cfsb1741477960761" } }, { "fullUrl": "http://clinfhir.com/fhir/Encounter/cfsb1741477976937", "resource": { "resourceType": "Encounter", "id": "cfsb1741477976937", "subject": { "reference": "Patient/cfsb1741477960761" } } }, { "fullUrl": "http://clinfhir.com/fhir/Observation/cfsb1741477994350", "resource": { "resourceType": "Observation", "id": "cfsb1741477994350", "subject": { "reference": "Patient/cfsb1741477960761" }, "encounter": { "reference": "Encounter/cfsb1741477976937" }, "code": { "coding": [{ "code": "14749-6", "system": "http://loinc.org", "display": "Glucose [Moles/volume] in Serum or Plasma" }] }, "valueQuantity": { "value": 1.4, "unit": "mmol/L" } } }, { "fullUrl": "http://clinfhir.com/fhir/Practitioner/cfsb1741478214286", "resource": { "resourceType": "Practitioner", "id": "cfsb1741478214286" } }, { "fullUrl": "http://clinfhir.com/fhir/Condition/cfsb1741478260396", "resource": { "resourceType": "Condition", "id": "cfsb1741478260396", "subject": { "reference": "Patient/cfsb1741477960761" }, "code": { "text": "Syndrome of infant of mother with gestational diabetes" }, "encounter": { "reference": "Encounter/cfsb1741477976937" } } }, { "fullUrl": "http://clinfhir.com/fhir/Observation/cfsb1742709067939", "resource": { "resourceType": "Observation", "id": "cfsb1742709067939", "subject": { "reference": "Patient/cfsb1741477960761" }, "code": { "coding": [{ "code": "14749-6", "system": "http://loinc.org", "display": "Glucose [Moles/volume] in Serum or Plasma" }] }, "status": "final", "encounter": { "reference": "Encounter/cfsb1741477976937" }, "valueQuantity": { "value": 2.1, "unit": "mmol/L" } } }, { "fullUrl": "http://clinfhir.com/fhir/MedicationRequest/cfsb1742938726703", "resource": { "resourceType": "MedicationRequest", "id": "cfsb1742938726703", "subject": { "reference": "Patient/cfsb1741477960761" }, "status": "completed", "intent": "instance-order", "medicationCodeableConcept": { "coding": [{ "code": "V06DC01", "system": "http://www.whooc.no/atc" }], "text": "Glucose" }, "encounter": { "reference": "Encounter/cfsb1741477976937" } } }] } </pre>
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Table 5

Birth weight	LOINC	8339-4 - Birth weight Measured
Blood glucose	LOINC	14749-6 Glucose [Moles/volume] in Serum or Plasma
2,0 ml Glucose gel	ATC	V06DC01