Floppy Infant - Full Clinical Neonatal Guideline – Joint Derby and Burton

Reference no.: NIC NE 05/ June 22/v003

1. Introduction

To ensure a standardised approach to the management of “floppy infants”

2. Aim and Purpose

To facilitate staff in making a timely diagnosis and management plan

3. Definitions

“Floppy” is used to describe a baby that has a subjective decrease in resistance to passive movement. This can be due to problem at any level of the neuromuscular system.

It is important to remember that hypotonia can be present in sepsis, premature babies and babies with hypoglycaemia.

4. Abbreviations

CK Creatinine kinase
CMD Congenital muscular dystrophy
CSF Cerebrospinal fluid
CT Computed tomography
DNA Deoxyribonucleic acid
EEG Electroencephalography
EMG Electromyelography
MRI magnetic resonance imaging
NCS Nerve conduction studies
TFTs Thyroid function tests
PWS Prader-Willi syndrome
SMN Survival motor neurone
VLCFAs Very long chain fatty acids.

5. Main body of Guidelines

History

A thorough and careful history is important to guide initial investigations. Questions that should be asked include:

- Maternal medical history: Diabetes
  Myotonic dystrophy
  Neuromuscular disease
  Muscle weakness
- Any significant family history: Affected siblings or parents
  Consanguinity

Previous unexplained neonatal/infant death

- Pregnancy: Drug exposure
  Reduced fetal movements,

  Polyhydramnios/oligohydramnios,
- Resuscitation at birth: Apgar scores
  Umbilical cord gases
- History since delivery: Respiratory effort
  Feeding difficulty

  Alertness

  Seizures/abnormal movements

  Spontaneous activity

  Cry

Examination

Examination should firstly confirm the presence of hypotonia in an infant. There are a number of manoeuvres to elicit reduced tone. These include

- Head lag
- "Rag-doll" posture on ventral suspension
- Observation of a "frog-leg" posture
- Vertical suspension
- "Scarf" sign positive

Once hypotonia has been confirmed the next step is to determine whether the problem is of central or peripheral origin. Typical features of each are shown in the table below.

Central hypotonia	**Peripheral hypotonia**
Normal movement	Reduced or absent spontaneous anti-gravity movement
Normal or brisk tendon reflexes	Normal or reduced reflexes
	Muscle fasciculation (rare but diagnostic)

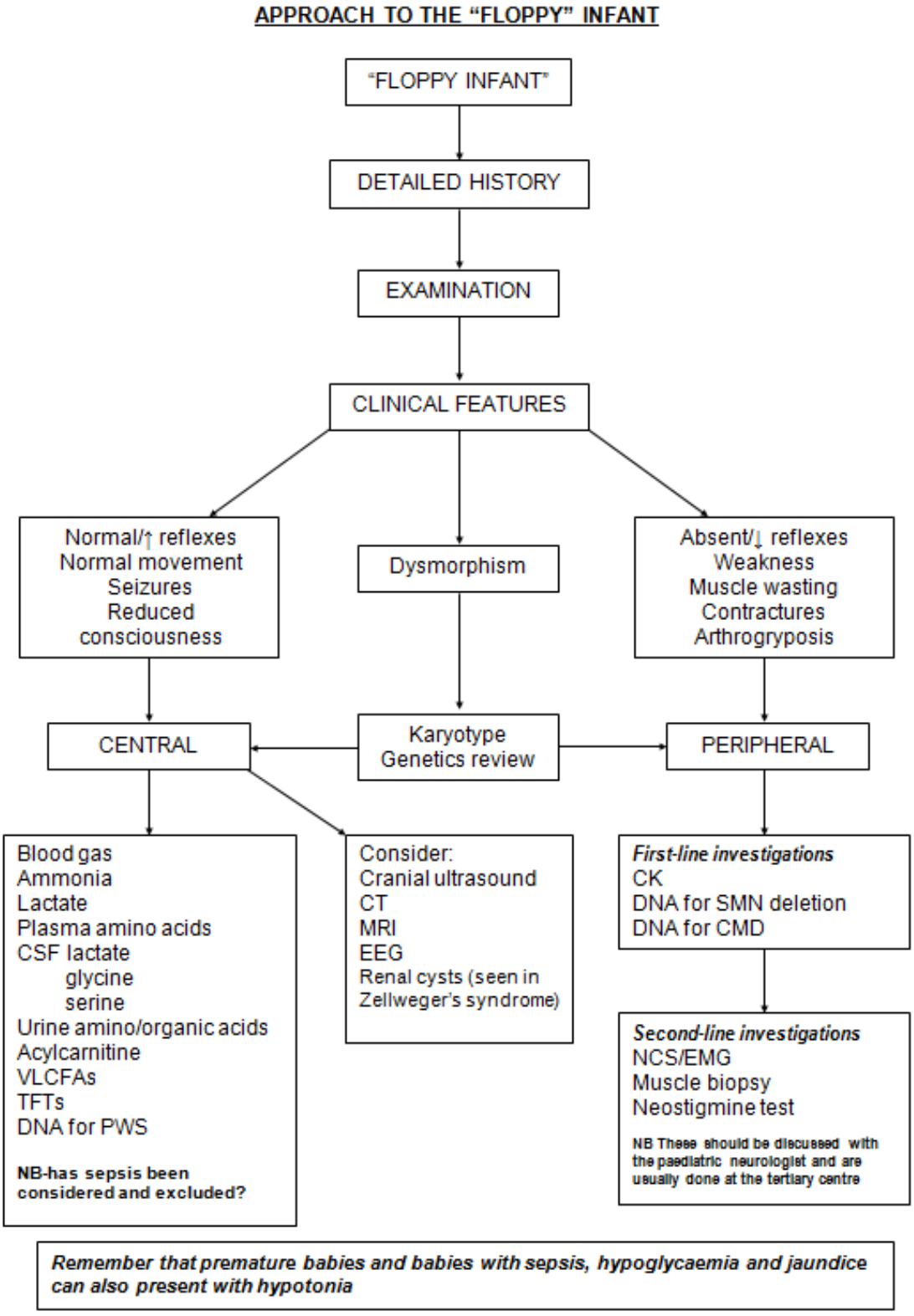
Additional clinical features that may indicate a specific diagnosis include:

- Hepatosplenomegaly – storage disorders, congenital infection
- Hypopigmentation, undescended testes – Prader Willi
- Abnormal odour – metabolic disease

Check if there are any maternal features to suggest myotonic dystrophy

Diagnostic approach

Once a decision about a central or peripheral aetiology has been made, investigations should be directed accordingly to identify the cause of the hypotonia, as outlined below.



6. References (including any links to NICE Guidance etc.)

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7. Documentation Controls

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