MOTHER'S WORRIES

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FEEDING

- There has been significant reliable evidence produced to show that breastfeeding is a major contributor to public health
- Below is a list of differences in health outcome associated with method of infant feeding. The studies have all adjusted for social and economic variables. All were conducted in an industrialised setting.
- Artificially-fed babies are at greater risk of:
- gastro-intestinal infection
- respiratory infections
- necrotising enterocolitis and late onset sepsis in preterm babies
- urinary tract infections
- ear infections
- allergic disease (eczema, asthma and wheezing)
- Type 1 and type 2 diabetes
- Obesity
- Childhood leukaemia
- SIDS

FEEDING

- Breastfed babies may have better:
- Neurological development
- Cholesterol levels
- Blood pressure
- Women who breastfeed are also at lower risk of breast and ovarian cancer
- Reference: UNICEF – Breastfeeding research – an overview

FEEDING

- Formula feeds are all based on cow's milk
- Infant formula contains a mixture of 2 types of protein – whey and casein
- All babies should be commenced on whey based formula
- This can be continued without change throughout the first year of life
- Above 1 year whole cow's milk should be introduced
- Casein based formula has little nutritional difference to whey based formula
- Casein based often described as for "hungry babies" but little evidence for this
- Little evidence for use of follow-on formula (usually casein based)

COLIC SYMPTOMS

COLIC

- Excessive, frequent crying in a baby who appears otherwise healthy
- Often begins in the first few weeks of life
- Usually improved/stops by 4 months and tends to resolve by 6 months
- No evidence that any treatment helps
- Infacol – simeticone
- Colief – lactase
- I would not recommend changing formula or trying milk free/lactose free diets unless convincing evidence of a milk intolerance

STOOLS

- Babies stools can be very varied in colour and consistency
- Stool colour is not usually a problem in isolation with the only exception being pale stools (but make sure that the stools are definitely pale)
- Often generates significant parental anxiety
- Stool colour and consistency is more relevant in the context of the wider history
- Stool reducing substances is not a useful test

TEETHING

- Teething can occur at any time
- Some babies are born with teeth, others start teething before they are 4 months old, and some after 12 months
- However most babies start teething at around 6 months

- Here's a rough guide to how babies' teeth usually emerge:
- bottom incisors (bottom front teeth) – usually first to come through at around 5 to 7 months
- top incisors (top front teeth) – tend to come through at about 6 to 8 months
- top lateral incisors (either side of the top front teeth) – these come through at around 9 to 11 months
- bottom lateral incisors (either side of the bottom front teeth) – these come through at around 10 to 12 months
- first molars (back teeth) – these come through at around 12 to 16 months
- canines (towards the back of the mouth) – these come through at around 16 to 20 months
- second molars – these come through at around 20 to 30 months
- Most children will have all of their milk teeth by the time they are two and a half years old.

BLOCKED TEAR DUCT

- A blocked tear duct is a partial or complete blockage in the pathway that carries tears from the surface of the eye into the nose.
- **Causes:**
- In children, the duct may not be completely developed at birth. It may be closed or covered by a thin film, which causes a partial blockage.
- Main symptom is increased tearing (epiphora), which causes tears to overflow onto the face or cheek. In babies, this becomes noticeable in the first 2 to 3 weeks after birth.
- Tears may appear to be thicker or dry and may become crusty.
- I recommend gentle massaging the area 2 to 3 times a day. Using a clean finger, rub the area from the inside corner of the eye toward the nose. This may help to open the tear duct.
- Majority open on their own by the time the infant is one year old.
- If not then probing may be necessary. This procedure is most often done using general anaesthesia and is almost always successful.

GORD

- Usually does not present in the first days after birth, probably because milk intakes are relatively low.
- Worse with formulas compared with breast milk
- **Effortless** (but parents often report projectile vomits)
- After a feed
- When the baby is lying flat
- Occasionally bloody from reflux oesophagitis
- In most babies the diagnosis is clinical

Diagnosis of GORD

- History
  - In infants and toddlers, there is no symptom or symptom complex that is diagnostic of GORD or predicts response to therapy.
- Investigation options are limited and invasive

Treatment options: Evidence based review

Lifestyle Changes

- Nutrition
  - Thickening
  - Early weaning (not evidence based)
- Positioning
  - reflux in supine infants with head elevated is equal or greater than in infants supine and flat
  - full upright position appears to decrease measured reflux
  - Left side-down and prone positions better than right side-down and supine positions
  - Prone and lateral positions not recommended
    - Increased risk of SIDS

Pharmacologic Therapies

- Histamine-2 Receptor Antagonists (H2RAs)
  - tachyphylaxis or tolerance;
  - rapid onset of action
- PPIs – superior to H2RAs
  - Not approved in infants <1 year of age
  - PPI and placebo produced similar improvement in crying
- Side effects
  - Headache, diarrhoea, constipation, nausea
  - Parietal cell hyperplasia, fundic gland polyps, hypergastrinemia
  - May increase rates of community-acquired pneumonia, gastroenteritis and candidemia, and necrotizing enterocolitis in preterm infants

Pharmacologic Therapies

- Prokinetics
  - Insufficient evidence to justify routine use
- Empiric trial of acid suppression as a diagnostic test
  - no evidence in infants and young children
  - trial of PPI is justified for up to 4 weeks in older children and adolescents

WEANING

- General recommendation is to wean at 6 months of age
- However, it is “safe” to wean at 17 weeks if deemed appropriate
- Perceptions are that early weaning can lead to increased risk of allergy, micronutrient deficiency and increased risk of infection

STAGE	AGE RANGE	CONSISTENCY	FOOD
1	Around 6 months (can be from 17 weeks)	Thicker consistency with some lumps; soft finger foods can also be introduced at this stage.	fruit and vegetables rice, pasta, potatoes, yam, bread and cereals meat, fish, pulses and eggs yoghurt, custard and cheese
2	Nine - twelve months	Mashed, chopped, minced consistency; more finger foods	
3	Twelve months and older	Mashed, chopped family foods and a variety of finger foods.	

WEANING

- Finger foods are foods cut up into big enough pieces for the baby to hold in their fist and stick out at the top. They should not be small enough that they may cause the baby to choke. A piece about the size of your own finger is a good approximate.

TONGUE TIE

- No strong evidence that tongue tie causes feeding problems other than severe tongue tie
- Increased maternal perception that tongue tie causes feeding difficulties
- However there is evidence that mothers report improved feeding post-frenectomy
- Simple procedure in infants – done as a day case
- No evidence that tongue tie is linked with speech problems

FEVER

- Fever is a huge cause for concern for parents and carers
- Very common in young children
- Most common reason for child to be taken to the doctor
- Second most common reason for a child to be admitted to hospital

FEVER

- Infections remain leading cause of death in children under 5
- Most fevers will be caused by a self-limiting viral infection
- Significant number of children will have no obvious cause of fever despite careful assessment

Traffic light system: green

Colour	Normal colour of skin, lips and tongue
Activity	Responds normally to social cues Content/smiles Stays awake or awakens quickly Strong/normal cry/not crying
Hydration	Normal skin and eyes Moist mucous membranes
Other	None of the amber or red symptoms or signs

Traffic light system: amber

Colour	Pallor reported by parent/carer
Activity	Not responding normally to social cues Wakes only with prolonged stimulation Decreased activity No smile
Respiratory	Nasal flaring Tachypnoea: RR>50/min age 6-12 months, RR>40/min age >12 months Oxygen saturation ≤ 95% in air Crackles
Hydration	Dry mucous membranes Poor feeding in infants CRT ≥3 seconds Reduced urine output
Other	Fever for ≥5 days Swelling of a limb or joint Non-weight bearing/not using an extremity A new lump >2cm

Traffic light system: red

Colour	Pale/mottled/ashen/blue
Activity	No response to social cues Appears ill to a healthcare professional Unable to rouse or if roused does not stay awake Weak/high pitched/continuous cry
Respiratory	Grunting Tachypnoea: RR>60 /min Moderate or severe chest indrawing
Hydration	Reduced skin turgor
Other	Age 0-3 months, temperature ≥38°C Age 3-6 months, temperature ≥39°C Non blanching rash Neck stiffness Focal neurological signs Bile-stained vomiting Bulging fontanelle Status epilepticus Focal seizures

Clinical assessment

- Check for any immediately life-threatening features.
- Use traffic light system to check for symptoms and signs that predict the risk of serious illness.
- Look for a source of fever and check symptoms and signs associated with specific diseases.
- Measure and record temperature, heart rate, respiratory rate, capillary refill time and assess for dehydration.

Clinical assessment

- Trust parents
- Trust your immediate impression unless observations/more detailed examination triggers concern
- Management of fever is about finding the focus
- If there is no focus then use of the traffic light system is even more important

Clinical assessment

- Three common sources of serious infection:
- Brain i.e. meningitis or encephalitis
- Chest
- Urine
- All of these can present with non-specific signs especially in young children

Parenteral antibiotics for meningitis

- For strongly suspected meningococcal disease it is recommended that the child is given parenteral antibiotics as soon as possible pre-hospital (Meningitis Research Foundation 2011)
- However this should not delay transfer to hospital
- The evidence is inconclusive
- However, in a well child with a fever and non-blanching rash it may be best to simply refer to hospital