Premature Babies

• Babies born before 37 weeks gestation
• Lack muscle strength to control movements
• Immature babies are prone to muscle imbalance
• Early motor development may be affected
Foetal Position

- Flexed arms and legs
- Knees and elbows tucked to midline
- Curved spine
- Head tucked forwards

- A snug, secure environment!
The ‘Frog Position’

- Gravity causes weak arms and legs to flop out to sides
- Leads to muscle imbalance
- Tendency for babies to feel unsafe and stressed
- Extended position can lead to abnormal tone and delay in motor development
Importance of Positioning

- Provides the building blocks to promote physical development
- Curled up posn helps baby control his/her behaviour to feel safer and more secure (self-organisation)
- Help protect fragile skin and joints
- Improve sleep quality
- Encourage relaxation
- Help conserve body heat and reduce energy expenditure
- Help baby understand midline and coordination
- Optimise respiratory function
- Develop visual skills
- Helps treat respiratory problems
Positional Support

In the womb:
- Tight abdominal muscles
- Bony pelvis and spine
- Diaphragm

Incubator/cot:
- Rolled up towels/blankets
- Special beanbags
- Gel packs
Nesting

- Nesting is one key factor in maintaining a beneficial position for a neonate.
- Position hands together near face
- Feet together
- Use positioning aids to provide a safe snug and supportive nest
Supine

- Gravity causes limbs to flop outwards so very important to provide appropriate support to prevent this.
- Reduces narrow head shape
- Head in midline will aid development
- Not optimal for oxygenation / energy expenditure
- Unrestricted access for procedures
- Clear visual monitoring
Side Lying

• Gravity is useful in this position!
• Limbs brought together to midline
• Helps develop hand to mouth coordination
• Ventilation/perfusion best in upper lung

• In this picture: Jenx Jentle range of positioning beanies specially designed for premature babies
Prone

- Supports sternum and rib cage
- Optimal for oxygenation
- Increase time in quiet sleep
- Lowers energy expenditure
- Baby must be monitored!

In this picture: Jenx Jentle range of positioning beanies specially designed for premature babies
Is Baby Unhappy?

- Sudden changes in HR, RR, SpO2,
- Colour
- Scowling face / crying
- Wriggling
- Extending / arching back
- Spreading fingers / toes
- Yawning

* Remember all babies are different and should be assessed individually*
Early Handling of Baby

- Movements should be done slowly and confidently
- Time procedures together to reduce need for regular handling
- Place hands to support behind baby’s hips and head and maintaining a slightly flexed posture.
  - This will help develop neck muscle strength.
Supported Sitting

• Start once baby medically able to tolerate
• Initially only do short periods in sitting supported by mum
• Use rolled blankets to provide appropriate support/limit pushing
• Check baby doesn’t slump down

• This type of chair is useful in the early days until baby can push against bar.
Progressing Sitting

• As head control and muscle strength improves use a chair that is more upright eg a tumbleform chair (approx 3/12 post expected due date).
• Continue to use extra support to maintain a good position if needed
• Sitting allows development of hand skills, encourages reaching, allows baby to look around / focus.
• Use toys to stimulate
Tummy Time

• Important to help strengthen neck and back
• Useful to start this when medically stable enough
• Start with short periods only

• Start by placing in prone on mums chest
• Use rolls under the chest to help support baby initially
Remember

• Babies depend on careful positioning for reassurance, to feel safe and comfortable.
• Correct positioning will promote physical and emotional development.
• All babies are individuals.
• Emphasis is on maintaining flexed posture especially early on.
• Physiotherapist should monitor physical development.
Suppliers of Neonatal Positioning Products

- Inspiration Healthcare – Neonatal Intensive Care products: positioning aids and developmental care (www.inspiration-healthcare.co.uk)

- Jenx Limited – Neonatal positioning: Jentle Range (www.jenx.com)
References

1. BLISS Publication: Handle Me With Care – Supporting your premature baby’s development 2006
3. Col MNG Nair et al; NICU Environment: Can We Be Ignorant? MJAFI 2003; 59: 93-95