

Ages		Swaddling		Foetal akinesia
Newborns	Premature (<38 weeks) Term (>38 weeks)	Increases risk of SID - more likely to be prone	Negative effect on mother-infant relationship compared to skin to skin	Lasting >3 weeks
Neonate	0-30 days	Later breastfeeding	Developmental hip dysplasia	Lack of normal muscle stretching
Infant	Early (1-12 months), Late (13-24 months)	Acute respiratory infection	Vitamin D deficiency	Causing:
Young child/toddler	2-6 years	Decreases pain scores	Decreases spontaneous awakening and arousability, greater quality sleep	Assessed by:
Child/school child	6-12 years	Increased risk of hyperthermia		Was your baby in pregnancy or start of development
Adolescent	12-18 years			
General MSK in utero conditions		Pain in later life		Risk factors for
MSK from intrauterine environment	Pathologies, uterus differences, growth restriction and arthrogryposis	Pain - increased heart rate	Hypothalamic pituitary adrenal axis reprogramming	Primigravida (first pregnancy)
Congenital contractures	AROM + PROM reduced with structural and or functional abnormalities of soft tissues	Higher risk of maladaptive responses to anxiety & stress provoking stimuli	Anxiety, depression, OCD, panic & PTSD	Small maternal size
Congenital anomalies	Malformations, disruptions, deformations, dysplasia	Cognitive functioning	Reduced cognition and visual motor integration	Uterine malformation
Arthrogryposis: Abnormal contracture of joints - curved joints		Increased size of amygdala		Uterine Fibromatosis
Signs that a child needs manual therapy		Periaqueductal grey	Immediate & permanent changes	Early Pelvic engorgement
Signs of a neck problem		Increased endorphin & enkephalin protein		Aberrant foetal position
Decreased cx ROM	Decreased neck tone + strength	Prevention:		Oligohydramnios
Asymmetric head shape	Difficulty sleeping supine	Non pharma therapies : Kangaroo care, massage, skin to skin contact, breastfeeding, NNS, oral sweeteners		Multiple gestation
Palpable lesion in joints/muscles of the cx spine		Parents:		Birthing injuries
		Increase emotional sensitivity		Forceps + perineal pressure
		Increase education		Mild injuries
		Lower parental stress		
				Moderate injuries



Birthing injuries (cont)		NNS if baby resists	
Severe injuries	Extra/sub-dural haemorrhages into joint capsules, torn ligaments, dura Haemorrhages of vertebral arteries	Consider:	Beac Shortened breastfeeding duration? Nipple Otitis media Denta Suffocation Allerg Poisoning Infect
Types of birth interventions + Risks		Recommended: Minimise pacifier use Delay introduction up to 1 month of age Limit use for soothing Wean from pacifier from 2-6 months of age	
Vaginal Birth	Clavicular f#	NP & NC pain	
Forceps	Skull f# CN palsy Brachial plexus injuries Facial nerve palsy Torticollis		
Ventouse	Cephalohaematoma Cranial f#		
Risks	Male (larger) First born Assisted delivery		
Ventouse:	Cup like suction device, attaches to the baby's head		
Non-pharma pain management			
Environment	Feeding methods	Other	
Skin to Skin contact	Non-Nutritive sucking (NNS)	Acupuncture	
Swaddling(?)	Breast Feeding	Sucrose	
Tucking			
Touch, massage			
Music			
Non-Nutritive sucking: Sucking not for the purpose of feeding Benefits: Improved digestion Behavioral organization (able to settle down after crying) Pain management Prevention of aspiration Decreased risk of SIDs			Neuropathic (NP) Nociceptive (NC)

Type of pain	Origin	Localisation	Character
NC – superficial somatic	Skin, mucosa	Well localised	Sharp May be prickling
NC – deep somatic	Bone, joints, muscles, CT	Well localised, tenderness to palpation	Dull Aching Throbbing
NC – visceral	Internal organs	Poorly localised, Palpation may create pain	Vague dull cramping deep pressure spasms, irritability
NP	Various sites, not always stimulus dependent	Poorly localised, diffuse + Sensory dysfunction	Difficult to burn, irritability needle like Sharp, shooting

