Managing Pain in Babies

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The IASP defines pain as an unpleasant sensory or emotional experience associated with actual or potential tissue damage or described in terms of such damage.

Pain alerts us to injury or disease and is subjective to each person's own unique experience thus the severity of pain with people experiencing the same condition varies.

Conditions that cause pain and fever in children include teething, earache, colic, meningitis, infection, post vaccination and trips and falls.

Symptoms of pain in infants and young children include crying, irritability, change in eating or drinking habits and perhaps touching or rubbing the site of pain.

Crying is a normally a baby's way of expressing their needs but can be an indicator of pain, for example if the crying cannot be soothed with a bottle, a nappy change or cuddling this could mean the baby is in pain. A baby who cries while nursing could possibly have a painful ear infection. Prolonged, intense crying, often at the same time each day is common with colic and is usually accompanied with the baby drawing up their legs to their abdomen. It often starts at the age of 2 weeks, peaks at 6 weeks, and then gradually declines.

In younger children pain may be easier to identify as they may be able to verbalise even by saying 'Ouch'. They will often also clutch the part that hurts. Pulling or rubbing the ear is can sometimes indicate ear pain.

Most types of pain can be managed in the pharmacy; however, it is important to be aware of danger symptoms where referral to their GP is required. These includes loss of weight, and children who do not appear to have responded to maximum doses of analgesics.

Paracetamol and Ibuprofen are available in various formulations and are indicated for the management of pain in infants and children.

Paracetamol is suitable from two months of age and is most commonly available and requested in a liquid oral formulation. At the foot of the page are the he recommended doses for infants and children.

Paracetamol is also available in suppository form with varying strengths and doses based on the child's weight.

Suppository formulation is particularly useful if rapid action is required and if there might be difficulty in administering an oral dose. Paralink™ 180mg suppositories are available as well as Tipol™ which is available in 75mg, 125mg, 250mg, 500mg and 1000mg. You will find images of the various dosage regimens for Paralink™ and Tipol™ on page 28.

Ibuprofen is also available most commonly as oral and suppository formulations. It is suitable from three months of age.

Nurofen™ is available as 60mg suppositories and Tefin™ suppositories are available in 50mg and 75mg suppositories. Dosing table also on page 28.

If Paracetamol or Ibuprofen alone are not sufficient in reducing pain or fever then it can be recommended to alternate between the two medicines every two hours as long as the maximum dose of either medication is exceeded.

Other management options can also be recommended to help relieve pain and provide comfort and soothing for the child.

For teething symptoms, the following recommendations can be made to the parents:

- gentle rubbing of the gum with a clean finger
- allowing the infant to bite on a clean and cool object, such as a chilled teething ring
- for children who have been weaned, the supervised use of chilled fruit or vegetables (such as bananas or cucumber)

The use of topical gels and granules are also options to recommend. Bonjela Teething Gel™ is suitable from four months of age and the recommended dose from the manufacturer is as follows:

Using a clean finger, massage a pea size amount of gel onto the sore area, not more than once every 3 hours. Do not apply more than six doses in any 24 hour period.

Teetha™ granules and gel are homeopathic products and are both suitable from three months of age. Each 300mg granules in a sachet contains Chamomilla Recutita (Chamomilla) 6c and each 1g oral gel contains Chamomilla 12c, Belladonna 12c, Aconite 12c.

One sachet can be given every 2 hours for a maximum of 6 doses during any 24-hour period and the gel can be applied every 4 hours for up to 6 times per day.

For colic, Infacol™ and Colief™ drops can also be helpful in easing discomfort and pain.

Infacol contains the active ingredient

TABLE

Recommended doses of Paracetamol (120mg/5ml) for infants and children (3 months–12 years)

Paracetamol for the treatment of mild to moderate pain and as an antipyretic.

Child's age	How much	How often (in 24 hours)
3–6 months	2.5mL	Four times
6–24 months	5mL	Four times
2–4 years	7.5mL (5mL +2.5mL)	Four times
4–8 years	10 mL (5mL + 5mL)	Four times
8–10 years	15mL (5mL + 5mL + 5mL)	Four times
10–12 years	20mL (5mL + 5mL + 5mL + 5mL)	Four times

Paracetamol (120mg/5ml) for the treatment of mild to moderate pain and as an anti-pyretic. Used for the relief of pain and feverishness associated with teething, toothache, headache, colds, flu and post-immunisation pyrexia.

Do not give more than 4 doses in any 24-hour period.

Leave at least four hours between doses.

Do not give this medicine to your child for more than three days without speaking to your doctor or pharmacist.

Babies aged over 2 months for the relief of fever after vaccination at 2, 3 and 4 months
2.5mL. This dose may be given up to four times per day at the time of vaccination. Do not give more than 4 doses in any 24-hour period. Leave at least four hours between doses. If your baby still needs this medicine two days after receiving the vaccine, talk to your doctor or pharmacist.

Source: EMC [17]

https://pharmaceutical-journal.com/article/ld/paracetamol-use-in-infants-and-young-children

Complete Range of Tipol Suppositories Paracetamol

Dosing Table for Tipol 75mg Suppositories Paracetamol.				
Body weight	Age	First dose (equivalent dose of paracetamol)	Interval between doses	Max. daily dose (equivalent dose of paracetamol)
3-4 kilograms	<3 months	1 suppository (75 mg paracetamol)	8 to 12 hours 1 suppository (75 mg paracetamol)	2 suppositories (150 mg paracetamol)
4-5 kilograms	<3 months	1 suppository (75 mg paracetamol)	6 to 8 hours 1 suppository (75 mg paracetamol)	3 suppositories (225 mg paracetamol)
4 kilograms	>3 months	1 suppository (75 mg paracetamol)	6 to 8 hours 1 suppository (75 mg paracetamol)	3 suppositories (225 mg paracetamol)
5-6 kilograms	>3 months	1 suppository (75 mg paracetamol)	6 hours 1 suppository (75 mg paracetamol)	4 suppositories (300 mg paracetamol)

Dosing Table for Tipol 125mg Suppositories Paracetamol.		
Body weight (Age)	Single dose (equivalent dose of paracetamol)	Maximum daily dose (24 hours) (equivalent dose of paracetamol)
7 kilograms (6-7 months)	1 suppository (equivalent to 125 mg of paracetamol)	3 suppositories (equivalent to 375 mg of paracetamol)
8-12 kilograms (7 months - 2 years)	1 suppository (equivalent to 125 mg of paracetamol)	4 suppositories (equivalent to 500 mg of paracetamol)
The dosage interval must be at least 6 hours		

Dosing Table for Tipol 250mg Suppositories Paracetamol.		
Body weight (Age)	Single dose (equivalent dose of paracetamol)	Maximum daily dose (24 hours) (equivalent dose of paracetamol)
13-15 kilograms (children 2 - 4 years)	1 suppository (equivalent to 250 mg of paracetamol)	3 suppositories (equivalent to 750 mg of paracetamol)
16-25 kilograms (children 4 – 8 years)	1 suppository (equivalent to 250 mg of paracetamol)	4 suppositories (equivalent to 1,000 mg of paracetamol)
The dosage interval must be at least 6 hours		

Dosing Table for Tipol 500mg Suppositories Paracetamol.		
Body weight (Age)	Single dose (equivalent dose of paracetamol)	Maximum daily dose (24 hours) (equivalent dose of paracetamol)
26-32 kilograms (8-11 years)	1 suppository (equivalent to 500 mg of paracetamol)	3 suppositories (equivalent to 1500 mg of paracetamol)
33-43 kilograms (11 - 12 years)	1 suppository (equivalent to 500 mg of paracetamol)	4 suppositories (equivalent to 2000 mg of paracetamol)
more than 43 kilograms (children and youth from 12 years and adults)	1 or 2 suppositories (equivalent to 500 or 1000 mg of paracetamol)	8 suppositories (equivalent to 4000 mg of paracetamol)
The dosage interval must be at least 6 hours		

http://www.carysforthealthcare.ie/files/Tipol%20Suppositories%20-%20Dosage%20Chart%20page%201.jpg

Tefin Suppositories Ibuprofen

Dosing Table for Tefin 75mg Suppositories Ibuprofen.			
Age	Body weight	Single dose	Maximum daily dose Number of suppositories (corresponding amount of ibuprofen)
8 to 12 months	7.5 to 10 kilograms	1 suppository (75 milligram)	3 suppositories (225 milligram daily)
12 months to 3 years	10 to 15 kilograms	1 suppository (75 milligram)	4 suppositories (300 milligram daily)

Dosing Table for Tefin 150mg Suppositories Ibuprofen.			
Age	Body weight	Single dose	Maximum daily dose Number of suppositories (corresponding amount of ibuprofen)
3 to 6 years	15 to 20 kilograms	1 suppository (150 milligram)	3 suppositories (450 milligram daily)
6 to 9 years	20 to 29 kilograms	1 suppository (150 milligram)	4 suppositories (600 milligram daily)

http://www.carysforthealthcare.ie/files/Tefin%20Suppositories%20-%20Dosage%20Chart%20page%201.jpg

simeticone and is clinically proven to help relieve wind, infant colic and griping pain and is suitable from birth onwards. The recommended dose is one dropper full (0.5ml) of Infacol should be given before each feed. This may be increased to two droppers full (1ml), if needed.

Colief contains lactase, a safe, naturally occurring enzyme produced within the small intestine and when added to a baby's usual milk greatly reduces the level of lactose by breaking it down into glucose and galactose before the baby is fed.

Resources:

https://www.medicines.ie/medicines/bonjela-teething-gel-oromucosal-gel-31457/spc

www.teetha.com

www.nicpld.org

www.colief.com

www.infacol.co.uk

News

€22m investment at Connolly Hospital

RCSI University of Medicine and Health Sciences has announced an investment of €22 million in the development of a new education and research centre at Connolly Hospital in Blanchardstown, Dublin.

The building will provide increased capacity for RCSI's translational research and will be the location for a new paediatric allergy research centre.

Due for completion in February 2024, the new centre will join the Smurfit Building, Education and Research Centre at Beaumont Hospital as RCSI's second clinical centre of academic excellence in Ireland. The construction contract for the new facility was signed today by RCSI University of Medicine and Health Sciences and Felix O'Hare & Co. Ltd.

Connolly Hospital is an integral part of the RCSI campus and this future-focused development reflects the university's commitment to the hospital and the broader RCSI Hospital Group. It will greatly enhance the student experience for the Graduate Entry Medicine students based at Connolly and for other RCSI students while on clinical placement at the hospital.

The building will provide increased capacity for RCSI's translational research and will be the location for a new paediatric allergy research centre.

The development will be alongside the recently opened CHI Ambulatory Paediatric Facility and will contribute to the continued expansion of services, facilities and the education and healthcare workforce at Connolly Hospital which serves the population of West Dublin and a wider region via the M50.

Professor P. Ronan O'Connell, RCSI President, said, "The development of this new clinical centre of academic excellence represents a significant investment for RCSI that will further strengthen our academic partnership with Connolly Hospital as well as the wider RCSI Hospital Group. The opening of the new centre will be transformative for our educational programmes, will greatly enhance the RCSI student experience and will enrich the local community."

"We want to play our part in building a health service with the capacity to meet the needs of our growing and aging population and which provides a fulfilling career for healthcare professionals. This new Centre will help us to reimagine the way we are educating our students so they can respond to changes in the scope of their practice and thrive in professionally and personally rewarding careers. It will also allow us to educate new professional groups such as Physician Associates, which is a relatively new profession in Irish healthcare with the potential to greatly improve efficiency and patient experience", added Professor O'Connell.