

Topical Local Anaesthesia



Comfort Kids Program 2017

Topical Local Anaesthesia (LA)

- How does topical LA cream works
- Misconceptions
- Cautions
- Preparation
- Application
- Alternatives
- Dosage
- Documentation



Basic Principles

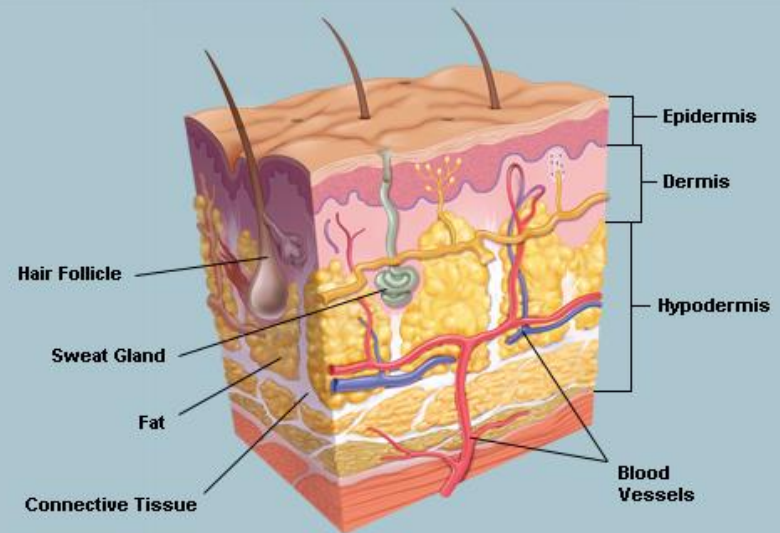
Topical anaesthesia – is a drug mixture(s) that provide a *local anaesthetic effect*

Topical anaesthesia effects the dermal pain receptors and nerve endings in the epidermis and dermis layers of the skin.

Only the area in which the drug is applied will become “numb” at a depth of 3-4 mm

Children and adults report feeling:

- **pressure** e.g. when the cannula is inserted
- **movement** e.g. vein rolls
- **sensations** e.g. tapping or palpating the skin
- **warmth or itchiness** (where drug applied)



2009 WebMD, LLC.

Amethocaine 4% = AnGel

- Amethocaine is an ester type local anaesthetic.
- It has high lipid solubility and **high affinity for neural tissue**.
- A **high protein binding** capacity (76%) **maintains the drug** at the **receptor site** with formation of a long-lasting depot in the stratum corneum and clearance by esterases in the skin and bloodstream.
- It **inhibits the initiation and transmission of nerve impulses** by **stabilising the neuronal membrane** (by blocking sodium ion influx across the axon). **Neuronal** conduction is **first** blocked in the **autonomic**, then in **sensory** and finally in **motor nerve fibres**.



Lignocaine 2.5% / Prilocaine 2.5% Emla

- Lidocaine and prilocaine are **amide-type** local anaesthetic agents
- EMLA Cream provides **dermal analgesia** by the release of lidocaine and prilocaine from the cream into the **epidermal** and **dermal** layers of the skin and by the **accumulation** of lignocaine and prilocaine in the vicinity of **dermal pain receptors and nerve endings**
- Both lidocaine and prilocaine **stabilize neuronal membranes** by **inhibiting** the **ionic fluxes** required for the initiation and conduction of impulses, thereby effecting local anaesthetic action.



Misconceptions

- Topical medication can **completely numb** all of the **nerves**
 - Nerves located in the mid to deeper layers of the skin are not effected by topical anaesthetic drugs
- The **child won't feel** anything or its pain free is misleading
- **Shorter** application **times** are equally **effective**
 - Research shows $\leq 30-45$ min is **not enough** time for blood sampling or injections
 - Depends on agent & procedure

Misconceptions

- **Emla** cream causes **vasoconstriction**
- Vasoconstriction **may** occur but it also can be caused by illness, dehydration & anxiety
- **AnGel** causes a **rash** this is an **allergic** response
- **Mild transient erythema (redness) & itching** due to the **vasodilatory** effect & may persist for hours



Caution

- Family & Patient keep away
 - eyes causes irritation
 - the mouth to prevent ingestion
- Health care professionals
 - apply with gloves
 - prevent accidental absorption or contact with eyes



Why is topical LA not used?



- Perceived **short duration** of procedure
- Perceived **insignificance** of pain/procedure
- Perceived alteration to vascular **accessibility**
- **Time** required for cream to work

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Preparation – Child & Parent

- Age specific explanation - EPT
- Describe the type of drug
- For all patients use the name “AnGel” or “Emla” cream
- For parent & teenagers more information is OK
 - Explain local anaesthetic drug
- Consider what you would you tell a child

How it will look & feel ?



Preparation Tips



- **How it looks & feels...**

- The cream on your skin helps to make your skin feel numb. Numb means that you can't feel that part of your skin as much or at all
- Angel or Emla Cream works by " numbing the top of the skin" like an icy pole numbs the top of your tongue
- Angel or Emla is placed on your hands or arms or ____ (procedure site)
- Other kids tell us " the numbing cream makes it more comfortable when you have the _____"(procedure)
- some kids say it feels squishy
- we use a clear band aid to keep the cream in place
- We will let you know when it is time to take the band aid off
- You can help by _____ & you can help take it off
- We will then see how your skin feels
- Other ?

Clinical Practice Guidelines

RCH > Division of Medicine > General Medicine > Clinical Practice Guidelines > Communicating procedures to families

In this section

Guidelines Index

Guideline Development

Other Resources

Mailing lists

Feedback

Communicating procedures to families

This guideline has been adapted for statewide use with the support of the Victorian Paediatric Clinical Network.

The following are some simple ways of enhancing communication with patients about procedures:

- Use clear and developmentally appropriate language.
- Speak at the child's eye level - this is less threatening.
- Avoid medical jargon - this can intimidate families.
- The use of negative words during procedure preparation can be minimised without being dishonest.
- Words like "hurt", "burn" and "sting" even when used with a modifier such as "little", "barely" and "not much" are negatively loaded and set up an expectation for distress.
- Use affirmative and positive language e.g. "Don't tense your arm" can be rephrased as "Keep your arm nice and relaxed".
- The table below includes a list of child friendly explanations for equipment and procedures. Every child and family is different and explanation will need to be tailored accordingly.

Child friendly explanations for medical equipment

Equipment	
Topical anaesthetic cream	The cream on your skin helps to make your skin feel numb. Numb means that you can't feel that part of your skin as much or not at all.

Child friendly explanations for medical procedures

Procedures	
Anaesthetic	Medicine we give you through the straw in your hand or with a mask that makes you go to sleep so the doctor can (<i>name procedure</i>). You will not feel anything. When it is finished you will wake up.
Blood test	A tube that goes under the skin to take a small amount of blood. <i>Explain reason for blood test.</i> It tells us information about how to make you better.
Fasting	You cannot eat or drink anything. <i>Explain reason why in developmentally appropriate terms.</i>
Flush IVC	Water goes into the straw with the syringe to make sure it is working.
Fracture	Broken bone.
Fracture reduction	Putting the broken bone back in the right spot so that it can get better.
Infusion	Medicine that takes a bit of time to go through the straw and into your body.
Injection	Medicine that we put into your body with a small needle.
Lumbar Puncture	A needle that goes into your back to take a small amount of fluid. <i>Describe positioning during lumbar puncture.</i> <i>Explanation of cerebrospinal fluid and the purpose of the test depends on the age of the child and anxiety level.</i>
Magnetic resonance imaging(MRI)/Computer	Takes a picture of the inside of you. <i>Describe what the child will see, sounds they will hear, how equipment will move, what the child's role is.</i>

Preparation



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PAEDIATRIC EMERGENCY MEDICINE

Practical communication guide for paediatric procedures

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Abstract

Children undergo many diagnostic and therapeutic procedures in the ED. Although emergency staff can often intervene to reduce physical pain through topical anaesthesia, analgesia and sedation, much procedural distress can be addressed by better preparing patients and families for the procedures. A key to guiding children through procedures is the use of age-appropriate and non-threatening language by all clinicians involved. We present a practical language guide for procedures and equipment for use by clinicians in the ED before, during and after procedures. The language tables might be most usefully placed in the procedure rooms for easy reference or incorporated into clinical practice guidelines.

Key words: *child, distraction, emergency department, language, procedure.*

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Application - vascular access

Blood sampling or vascular access

- **Apply to unbroken skin**
 - in a **strip** like fashion
 - **along** the **length of the vein**
 - 3-4cm long x 0.5mm wide
 - allow the Proceduralist **choice of insertion site**
- **Apply to multiple sites**
 - Explain to the parent & child
 - So we can choose the best vein for the test
- **Apply a dressing over the drug**
 - Tip - write the application time on the dressing
 - What dressing will you use ?



Application – Injections / Ports

- Following local clinical protocols (where available)
 - Port access
 - Botox injections
 - Joint injections
 - IM & S/C injections
 - Insuflon insertion
- Tips
 - Check site(s) with team – Oncology / Rheum / Dev Med
 - Apply to unbroken skin no > 50 cent coin to designated site(s)
 - Apply a dressing with application time



Alternatives Dressings & Devices

- **Dressing** allergies, aversions or anxiety to removal
 - LA + gauze square + cling wrap - secure with paper tape
 - LA + gauze square + secure with crepe bandage
 - LA + gauze square + Glad Press n Seal (TBA)
- **Devices**
 - Buzzy Bee (ice & vibration)
 - Coolsense



Recommendations

RCH Topical Anaesthesia

Topical LA creams	Emla [®] 2.5% Lignocaine & 2.5 % Prilocaine	AnGel [®] Amethocaine gel 4%
Recommended for	Those with allergies to AnGel [®] > 3 months of age	Preferred drug of choice at RCH > 1 month of age
Recommended Application time	60-90 minutes 60-90 minutes venepuncture (children aged 1–5 years) 90 minutes for venous cannulation (children aged 1–5 years) Remove @ 60-90 min	45-60 minutes 30 minutes venepuncture 45 minutes venous cannulation Remove @ 60 min
Effective for	2 hours* EMLA [®] is generally equivalent to AnGel [®] , but EMLA [®] application time is longer and effect shorter	1.0-5 hours with 60 min application * 0.5-3 hours with 30 min application *

*How long Emla[®] and AnGel[®] are effective is dependent on: optimal application time, how it is applied and amount of drug applied to skin.

* AnGel[®] deteriorates if not stored correctly. Store in the refrigerator and protect from light. Once removed from the refrigerator store at room temperature for no more than 30 days. Mark the date on the tube when it is first opened.

* AnGel[®] may cause a mild transient erythema (redness) & itching due to the vasodilatory effect. This may disappear within 20 minutes after removal of the gel or persist for several hours. Emla[®] may also cause a transient, local blanching followed by a transient, local redness or erythema.

Action	<p>EMLA provides dermal analgesia by the release of lidocaine and prilocaine from the cream into the epidermal and dermal layers of the skin and by the accumulation of lignocaine and prilocaine in the vicinity of dermal pain receptors and nerve endings.</p> <p>Both lidocaine and prilocaine stabilize neuronal membranes by inhibiting the ionic fluxes required for the initiation and conduction of impulses, thereby effecting local anaesthetic action.</p>	<p>AGel[®] inhibits the initiation and transmission of nerve impulses by stabilising the neuronal membrane (by blocking sodium ion influx across the axon). Neuronal conduction is first blocked in the autonomic, then in sensory and finally in motor nerve fibres.</p>
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Topical anaesthesia agent	Amethocaine 4%	Lignocaine 2.5% & Prilocaine 2.5%
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Description	Angel®	EMLA®
Recommended for children	> 1 month (corrected age)	> 37 weeks (corrected age)
RCH practice points	Preferred drug of choice at RCH due to a more rapid onset of action and extended duration of action (O'Brien, Taddio et al. 2005, Lander 2014).	Use on children with allergies to Angel®
Application time	60 minutes	60 minutes
Max time on skin	1 hour Remove topical anaesthesia @ 60 mins	1 hour Remove topical anaesthesia @ 60 mins
Duration of anaesthesia	4-6 hours	2-4 hours
Expected response	Mild transient erythema (redness) and itching are common due to the vasodilatory effects of Angel®	Emla® may also cause a transient local blanching followed by local redness or erythema.
Adverse reactions	Severe erythema, oedema, itching or blistering should be treated by removing the gel immediately. Always record and report adverse events.	Severe erythema, oedema, itching or blistering should be treated by removing the gel immediately. Always record and report adverse events.
Storage	Angel® deteriorates if not stored correctly. Refrigerate unopened tubes to maintain shelf life (up to 6 months). Do not freeze	Store below 25° C, do not freeze or refrigerate



AnGel & EMLA RCH PPM CPG

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RCH Pharmacy AnGel

What is Local AnGel?



AnGel is a topical local anaesthetic used prior to minor procedures such as IV cannulation and venepuncture.

5g or 30g tubes of Amethocaine 4% in a white, opalescent gel base.

- [How is Local AnGel applied?](#)
- [Do NOT use Local AnGel on](#)
- [Storage](#)
- [Contact Us](#)
- [Sales & Distribution](#)
- [Product Information](#)
- [Consumer Medicine Information](#)

How is Local AnGel applied?



Bring the gel to room temperature (for ease of application and spreadability).

Select ONE or TWO sites over a visible vein under intact, healthy skin (eg. back of hand, cubital fossa).

Apply 0.5g as a thick layer of gel (approximately the size of a \$2 coin).



Other Important Information

Adequate anaesthesia is usually achieved after:

- 30 minutes for venepuncture
- 45 minutes for venous cannulation

Anaesthesia persists for 4-6 hours after the gel is removed.

Mild transient erythema (redness) and itching are common due to the vasodilatory effect of Local AnGel and may persist for some hours.

Severe erythema, oedema, itching or blistering should be treated by removing the gel immediately.

Always record and report adverse events.

Do NOT use Local AnGel on

- Broken skin
- Eyes
- Ears
- Inflamed skin
- Mucous membranes
- Premature infants and full term infants less than one month of age
- Patients with known hypersensitivity to ester type local anaesthetics or hydroxybenzoates

Storage

- Refrigerate unopened tubes to maintain shelf life (up to 6 months)
- Do not freeze
- Upon opening, mark the tube with date of opening
- After opening may be kept at room temperature
- Discard 30 days after opening



Cover with an occlusive dressing. Record time of application.



Leave in place for 30-60 minutes (maximum).

Remove dressing and wipe off gel prior to commencing procedure.

DO NOT LEAVE ON FOR MORE THAN 60 MINUTES

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Improving the quality use of Local AnGel (Amethocaine 4% gel) for prevention of procedural pain in children undergoing venepuncture procedures

Christine Plover Pharmacy Department, The Royal Children's Hospital, Melbourne



Background

Venepuncture procedures are a common source of pain and anxiety for hospitalised children. Despite abundant evidence that local anaesthetic agents are useful in the prevention of procedural pain, children often undergo venepuncture without their benefits. This quality improvement study was designed to improve the use of topical Amethocaine 4% gel (Local AnGel) for venepuncture pain at The Royal Children's Hospital (RCH), a major paediatric teaching hospital in Melbourne, Australia.

Aims

The primary aim of this study was to increase the use of Local AnGel for venepuncture procedures in the outpatient pathology department, in the hope of decreasing venepuncture pain in children, and reducing related fear and anxiety states.

The specific aims of the study were:

- To assess the frequency of use of Local AnGel in venepuncture procedures at RCH;
- To investigate staff knowledge, attitudes and perceived barriers towards use of Local AnGel;
- To implement an awareness and education campaign on appropriate use of Local AnGel; and
- To assess the impact of these implemented awareness and educational strategies on the frequency and appropriateness of use, and on the staff knowledge and attitudes towards use of Local AnGel.

Method

The study targeted the pathology collection department of the hospital (the main site of outpatient venepuncture procedures), as well as the main referring outpatient clinics. A clinical audit was performed to assess the frequency of topical anaesthetic use. Staff knowledge, attitudes and perceived barriers towards the use of topical anaesthetics were assessed with a focus group discussion and questionnaires. A variety of promotional and educational interventions were then implemented, based on the outcomes of the initial investigations. The frequency of topical anaesthetic use, in addition to staff knowledge, attitudes and perceived barriers towards its use, were reassessed following these interventions.

Interventions

Informational posters on the availability of Local AnGel were displayed in outpatients clinic, waiting areas and pathology collection waiting areas. The posters informed readers of the option of a local anaesthetic gel to prevent venepuncture pain.

An educational campaign was run with in-service education sessions. These education sessions were designed to inform the staff of the availability of Local AnGel and its appropriate use, including time and site of application. The sessions also included information on expected side effects.

Local AnGel 'baskets' were also created for clinics. These baskets were designed to encourage doctors to prescribe and/or apply Local AnGel at the time of ordering the blood test.

The baskets contained:

- Blank pathology request slips for ordering blood tests
- Local AnGel stickers for pathology request slips for doctors to record the time of application of Local AnGel (so that the pathology staff would be aware of AnGel having been applied)
- Local AnGel stickers for children's clothing
- Occlusive dressings such as Tegaderm®
- Product information sheet on Local AnGel previously produced by pharmacy department
- Instruction sheet from Orion (manufacturer) including application instructions and diagrams
- Local AnGel tubes in use (tubes are stored in the refrigerator until opened)



Figure 1: Informational poster

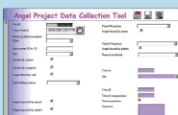


Figure 2: Audit data collection tool

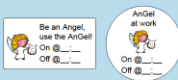


Figure 3: Local AnGel stickers

Results

Of the 176 patients in the initial audit, 18 patients received Local AnGel (10.2%). In the post-intervention audit, total Local AnGel use was increased to 29 patients out of 139 (20.9%), an absolute improvement of 10.6% (Fisher exact probability: $p = 0.0106$, 95% CI 2.5% to 18.7%). Five of the patients in the initial audit presented for venepuncture with Local AnGel already in situ (2.8%); this was increased to 19 patients (13.7%) in the post-intervention audit, an absolute improvement of 10.9% (Fisher exact probability: $p = 0.0004$, 95% CI 4.4% to 17%). Increases were also seen with the proportion of venepuncture patients offered Local AnGel by pathology staff (10.9% absolute increase), and the proportion of patients having Local AnGel applied for an appropriate amount of time (22.5% absolute increase), but these changes failed to reach statistical significance (Fisher exact probability: $p = 0.08$ in both cases).

All staff members participating in the pre-intervention questionnaires claimed to have used the gel previously, although some staff members did not know the correct site or time of application of the gel. Knowledge scores were improved in the repeat questionnaire following education sessions on the appropriate use of Local AnGel.

Table 1: Baseline and post-intervention audit results

	Before	After	Absolute difference	95% CI	Relative difference	95% CI	p
Total patients receiving AnGel	18%	20.9%	2.9%	0.2% - 5.6%	1.67x	1.18 - 2.32	0.0106
Patients AnGel already in situ	2.8%	13.7%	10.9%	6.7% - 15.1%	3.9x	3.06 - 5.06	0.0004
Appropriate use offered	20.4%	43.9%	23.5%	18.2% - 28.7%	2.13x	1.66 - 2.82	0.008
Appropriate use applied	2.8%	22.3%	19.5%	14.9% - 24.1%	8.0x	5.41 - 12.07	0.0004

Table 2: Questionnaire results: purple indicates target of intervention

Q1	In your opinion, does the pain of venepuncture affect the success of the venepuncture procedure as a child?	Not at all	Mild effect	Moderate effect	Severe effect	Unanswered	
Pre		0	1	3	0	1	
Post		0	1	0	0	1	
Change		0	0	-3	0	0	
Q2a	Do you think the pain of venepuncture experienced by a child has a negative impact on the child having the venepuncture?	Yes	No	Unanswered			
Pre		16	2	0			
Post		15	2	1			
Change		-1	0	1			
Q2b	Do you think the pain of venepuncture experienced by a child has a negative impact on the performance of the child?	Yes	No	Unanswered			
Pre		17	1	0			
Post		16	1	1			
Change		-1	0	1			
Q3a	Do you think the pain of venepuncture experienced by a child has a negative impact on the blood?	Yes	No	Unanswered			
Pre		1	0	0			
Post		1	0	0			
Change		0	0	0			
Q3b	Have you heard of Local AnGel before?	Yes	No	Unanswered			
Pre		16	0	0			
Post		16	0	0			
Change		0	0	0			
Q4	Have you ever applied Local AnGel on a child to reduce venepuncture pain?	Yes	No	Unanswered			
Pre		16	0	0			
Post		16	0	0			
Change		0	0	0			
Q5	How effective do you think Local AnGel is in preventing venepuncture pain?	Not at all	Mildly effective	Moderately effective	Very effective	Unanswered	
Pre		0	1	5	4	0	
Post		0	1	3	4	0	
Change		0	0	-2	0	0	
Q6	How long should Local AnGel be applied for when being used to prevent venepuncture pain?	15-30 mins	30-45 mins	45-60 mins	>60 mins	Unanswered	
Pre		0	15	10	0	0	
Post		0	1	18	0	0	
Change		0	-14	3	0	0	
Q7	Generally, where should Local AnGel be applied for venepuncture?	Distal of site	Back of hand	Wrist	Forearm	Cubital fossa	Unanswered
Pre		0	0	0	0	0	
Post		0	0	0	0	17	
Change		0	0	0	0	17	
Q8	Is Local AnGel available in the area where you work?	Yes	No	Unanswered			
Pre		16	0	0			
Post		16	0	0			
Change		0	0	0			
Q9	When was the last time you had practice instructions about the use of Local AnGel?	Never	<2 years ago	1-2 years ago	3-12 months ago	>6 months ago	Unanswered
Pre		16	0	0	0	0	
Post		0	0	0	18	0	
Change		-16	0	0	18	0	
Q10	Are you a member of?	Pathology	Day 1 training	Day 2 training	Medical	Other allied health	Unanswered
Pre		16	1	0	0	0	
Post		16	1	0	0	0	
Change		0	0	0	0	0	

Conclusions

The use of local anaesthetic for prevention of venepuncture pain in paediatric patients is low, despite it being recommended as standard practice at the Royal Children's Hospital. Simple intervention measures that encouraged prescribers to offer Local AnGel at the time of ordering blood tests resulted in almost five times the number of patients presenting to pathology collection with AnGel in situ. This project achieved a more than 100% increase in the overall use of Local AnGel for preventing venepuncture pain in paediatric outpatients, and was an important quality improvement project for the hospital.

RCH Pharmacy AnGel Research

EMLA AMH

Age	Dosage	Maximum dosage
37 weeks (corrected age)	Use a syringe to measure 1 g = 1 mL	Maximum 1 g for up to 1 hour No more than 1 dose in 24 hours
Babies (at term) – 3 months of age	Apply 0.5–1 g of cream	Maximum 1 g for up to 1 hour No more than 1 dose in 24 hours
4-12 months	Estimate a 1 g dose by applying a thick layer of cream the size of a \$2 coin	Maximum 2 g for up to 4 hours No more than 2 doses (separated by at least 12 hours) in 24 hours.
1-6 years	Estimate a 1 g dose by applying a thick layer of cream the size of a \$2 coin	Maximum 10 g for up to 4 hours No more than 2 doses (separated by at least 12 hours) in 24 hours.
7-12 years	Estimate a 1 g dose by applying a thick layer of cream the size of a \$2 coin	Maximum 20 g for up to 4 hours No more than 2 doses (separated by at least 12 hours) in 24 hours.
13-18 years	Estimate a 1 g dose by applying a thick layer of cream the size of a \$2 coin	The usual maximum dose is 60 g on intact skin for up to 5 hours.

Documentation MAR



Inpatients

- Topical anaesthetic agents are able to be order as a Nurse Initiated Medication. This will be captured on the MAR. Please refer to maximum dosing in the Procedural Pain Management CPG.

Outpatients

- Pathology Collectors managing inpatients in A6 require the RN to order topical anaesthesia as a Nurse Initiated Medication.
- Pathology Collectors are endorsed by the Director of Laboratory Services/ Haematologist in the application of AnGel, as requested by carers

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Documentation MAR output

AMETHOCAINE

Browse (F4)
Preference List (F5)
Facility List (F6)
Clear Selected

Only Favourites ★

- Medications
- Nurse Initiated Medications
- Imaging
- Labs
- Procedures
- Consults/Referrals
- Diet
- CLD
- Nursing
- Supplies
- Miscellaneous
- Diagnostic
- Immunisations
- Order Panels
- Order Panels

Nurse Initiated Medications (Medications)

<input type="checkbox"/> adrenaline 1:1,000 injection	<input type="checkbox"/> hypromellose eye drops 0.5%	<input type="checkbox"/> paracetamol tablet
<input type="checkbox"/> adrenaline respirator solution 1%	<input type="checkbox"/> ibuprofen suspension 20 mg/mL	<input type="checkbox"/> paraffin (POLYVISC) eye ointment
<input checked="" type="checkbox"/> amethocaine (ANGEL) 4 % gel	<input type="checkbox"/> ibuprofen tablet	<input type="checkbox"/> polyvinyl alcohol - povidone (Refresh) minims eye drops
<input type="checkbox"/> carmellose minims (CELLUFRESH) eye drops 0.5%	<input type="checkbox"/> lignocaine - prilocaine (EMLA) cream	<input type="checkbox"/> salbutamol inhaler 100 mcg/actuation
<input type="checkbox"/> chlorhexidine 0.2% solution	<input type="checkbox"/> MYLANTA P suspension	<input type="checkbox"/> sodium chloride 0.9 % flush
<input type="checkbox"/> choline salicylate (BONJELA) gel 9%	<input type="checkbox"/> paracetamol elixir (raspberry) 48 mg/mL	<input type="checkbox"/> sodium chloride 0.9 % injection (to use as eyewash)
<input type="checkbox"/> glycerol suppository	<input type="checkbox"/> paracetamol suspension 48 mg/mL	<input type="checkbox"/> sucrose solution 33%

Imaging

MRI (Imaging)

<input type="checkbox"/> MRI Brain	<input type="checkbox"/> MRI Extremity Upper Limb	<input type="checkbox"/> MRI Spine
<input type="checkbox"/> MRI Extremity Lower Limb		

Labs

Labs (Labs)

<input type="checkbox"/> Coagulation Screen	<input type="checkbox"/> Erythrocyte Sedimentation Rate	<input type="checkbox"/> Liver Function Test
<input type="checkbox"/> C-Reactive Protein	<input type="checkbox"/> Full Blood Count	<input type="checkbox"/> Urea, Creatinine and Electrolytes

Procedures

Derm (Procedures)

<input type="checkbox"/> Destruction of Lesion	<input type="checkbox"/> Skin / Nail Biopsy	<input type="checkbox"/> Skin Excision
<input type="checkbox"/> Epidermal / Dermal Shaving		

Selected Orders

Medication

- amethocaine (ANGEL) 4 % gel

Documentation MAR inpt

amethocaine 4 % gel

 Accept
 Cancel

Route:

Frequency:

PRN reasons: prior to procedure

PRN comment:

For: Doses Hours Days

Starting: At:

Starting: **Today 17:31** **Until Discontinued**

i There are no scheduled times based on the current order parameters.

Admin. Inst.: [Apply 60-90 min before procedure.](#)

Prod. Admin. (none)

Inst.:

Priority:

▶ [Additional Order Details](#)

i Next Required

 Accept
 Cancel

Documentation MAR inpt

lignocaine-prilocaine (EMLA) cream
✓ Accept ✗ Cancel

Reference Links: [1. Australian Medicines Handbook - Children's Dosing Companion](#) [2. RCH Pharmacy Medicines Information](#)

Route:

Frequency:

PRN reasons: prior to procedure

PRN comment:

For: Doses Hours Days

Starting: At:

Starting: **Today 17:29** **Until Discontinued**

i There are no scheduled times based on the current order parameters.

Admin. Inst.: [Apply 45-60 min before procedure.](#)
 Prod. Admin. Inst.: Apply at least 60 minutes prior to procedure.

Priority:

▶ [Additional Order Details](#)

***i* Next Required**
✓ Accept ✗ Cancel

Resources

- RCH Medication procedure
- Procedural Pain Management CPG
- Comfort Kids Website
- Communicating procedures to children CPG
- Pharmacy – Local AnGel
 - http://www.rch.org.au/pharmacy/business_development/Local_AnGel/
 - http://www.rch.org.au/pharmacy/research/Improving_the_quality_use_of_Local_AnGel_Amethocaine_4_gel_for_prevention_of_procedural_pain_in_children_undergoing_venepuncture_procedures/