



ADULT MEDICATION GUIDELINE

Glyceryl Trinitrate

Scope (Staff):	All WNHS Staff
Scope (Area):	Obstetrics and Gynaecology

This document should be read in conjunction with the [Disclaimer](#).

Quick Links

[Dose](#)

[Administration](#)

[Monitoring](#)

[Pregnancy and Breastfeeding](#)

Restrictions

[Formulary: Unrestricted](#)

Medication Class

Nitrates

Presentation

Ointment (Rectogesic®): 0.2% (2 mg/g)

Transdermal patch: 5 mg/ 24hr & 10 mg/ 24hr

Ampoule: 50 mg/ 10 mL

Sublingual spray: 400 microg/ dose

Storage

Ointment: Store at room temperature, below 25°C and protect from light

Transdermal patch: Store below 30°C

Ampoule: Store at room temperature, below 25°C and protect from light

Sublingual spray: Store at room temperature, below 25°C

Dose

Uterine Relaxant (Caesarean Birth)

Sublingual spray:

1 to 2 sprays (400 - 800 microg) administered as spray droplets under the tongue (do not inhale)

Repeat after 5 minutes if hypertonus sustained

IV Bolus:

Administer 50 – 100 microg (1 – 2 mL of the solution prepared below) intravenously

Tocolytic (Second line)

Transdermal patch:

Apply a 5 or 10 mg patch to abdominal skin, and repeat the dose in 1 hour if the contractions persist (Maximum dose of 20 mg in 24 hours)

Uterine Inversion

Sublingual spray:

400 microg sublingually

Anal fissures

Ointment:

Refer to [Adult Medication Protocol: Anorectal Products](#)

Administration

If possible, use non-PVC bags and giving sets to reduce adsorption of medication onto plastic. If PVC bag and/or giving sets are used, titrate the dose and rate to effect.

IV Bolus for Uterine Relaxation (Caesarean Birth)

NB: The standard IV preparation of GTN requires careful dilution in preparation for administration.

Dilution: Add 1 mL (5 mg) of GTN into a 100 mL bag sodium chloride 0.9% (concentration is 50 microg/ mL)

Withdraw 20 mL (label syringe clearly) and discard remaining premixed GTN bag.

Administration: Give 1 – 2 mL (50 – 100 microg) of the diluted solution and repeat after 15 - 30 seconds if required.

Sublingual spray:

Prime spray before using for the first time by pressing nozzle 5 times into air or prime with 1 spray if it hasn't been used for 7 days. 5 sprays are required for priming if it has been more than

4 months since use. Spray under the tongue, do not inhale.

Transdermal patch:

Apply to clean, dry skin on the chest or upper arm.

Ointment:

Refer to [Adult Medication Protocol: Anorectal Products](#)

Monitoring

IV: monitor blood pressure and heart rate and have vasopressor on hand. Observe for uterine atony and manage accordingly.

Continuous cardiac monitoring may be required.

Do not stop GTN IV infusion abruptly because of the potential for rebound symptoms.

Pregnancy

1st Trimester: Considered safe to use

2nd Trimester: Considered safe to use

3rd Trimester: Considered safe to use

Breastfeeding

Considered safe to use (ointment)

Monitoring required (IV, transdermal, sublingual)

For more information, please contact [KEMH Obstetric Medicines Information Service](#).

Related Policies, Procedures & Guidelines

WNHS Clinical Practice Guidelines:

[Caesarean birth](#)

[Preterm labour](#)

Adult Medication Monograph: [Anorectal Products](#)

[Postpartum Complications \(PPH, uterine inversion\)](#)

[Preoperative Medication Management](#)

Adult Resuscitation Drug Protocol - [Glyceryl Trinitrate \(GTN\) Spray](#)

References

MIMS Australia. Rectogesic®. In: MIMS Online [Internet]. St Leonards (New South Wales): MIMS Australia; 2020 [cited 2022 Apr 08]. Available from: <https://www.mimsonline.com.au>

MIMS Australia. Nitrolingual Pumpspray. In: MIMS Online [Internet]. St Leonards (New South Wales): MIMS Australia; 2022 [cited 2022 Apr 08]. Available from: <https://www.mimsonline.com.au>


Australian Medicines Handbook. Glyceryl Trinitrate. In: Australian Medicines Handbook [Internet]. Adelaide (South Australia): Australian Medicines Handbook; 2022 [cited 2022 Apr 08]. Available from: <https://amhonline.amh.net.au>

The Royal Women's Hospital. Glyceryl Trinitrate. In: Pregnancy and Breastfeeding Medicines Guide [Internet]. Parkville (Victoria): The Royal Women's Hospital; 2021 [cited 2022 Apr 08]. Available from: <https://thewomenspbmg.org.au/>

MIMS Australia. DBL Glyceryl Trinitrate Concentrate Injection. In: MIMS Online [Internet]. St Leonards (New South Wales): MIMS Australia; 2022 [cited 2022 Apr 08]. Available from: <https://www.mimsonline.com.au>

MIMS Australia. Transiderm-Nitro. In: MIMS Online [Internet]. St Leonards (New South Wales): MIMS Australia; 2020 [cited 2022 Apr 08]. Available from: <https://www.mimsonline.com.au>

Society of Hospital Pharmacists of Australia. Glyceryl Trinitrate. In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2022 [cited 2022 Apr 08]. Available from: <http://aidh.hcn.com.au>

Keywords	Glyceryl Trinitrate, Tocolytic, Uterine Relaxant, GTN				
Document Owner:	Chief Pharmacist				
Author/ Reviewer	KEMH Pharmacy Department				
Version Info:	4.0				
Date First Issued:	05/2015	Last Reviewed:	01/2021	Review Date:	04/2022
Endorsed by:	Medicines and Therapeutics Committee			Date:	02/08/2022
NSQHS Standards Applicable:	<input checked="" type="checkbox"/>  Std 1: Clinical Governance		<input checked="" type="checkbox"/>  Std 4: Medication Safety		
Printed or personally saved electronic copies of this document are considered uncontrolled. Access the current version from WNHS HealthPoint.					

The health impact upon Aboriginal people has been considered, and where relevant incorporated and appropriately addressed in the development of this document (insert ISD Number). (Please refer to the Aboriginal Health Impact Statement and Declaration for Department of Health and Health Service Provider Guidelines – please delete once you have completed this).

This document can be made available in alternative formats on request for a person with a disability.

© Women and Newborn Health Service 2022

Copyright of this material is vested in the State of Western Australia unless otherwise indicated. Apart from any fair dealing for the purposes of private study, research, criticism or review, as permitted under the provisions of the Copyright Act 1968, no part may be reproduced or re-used for any purposes whatsoever without written permission of the State of Western Australia.