SOP for the use of the Geko™ VTE prevention device

Author/Owner	**Core Labour Ward Midwife and Practice Educator Midwife/ Maternity Guideline Group**	
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Table of Contents

1.0 Introduction

Pulmonary embolism (PE) is the leading cause of maternal death in the developed world (MMBRACE-UK- Saving Lives, Improving Mothers' Care 2020). During pregnancy patients are five times more likely to develop a deep vein thrombosis (DVT).

NICE alongside the RCOG recommends the use of low molecular weight heparin (LMWH) and/or mechanical compression in high-risk patients during the antenatal, intrapartum and postnatal periods. However, in some cases the options for prophylaxis can be contraindicated. Without a suitable alternative for prophylaxis the risk of VTE for these patients remains high.

2.0 Objective

The Geko™ device is recommended by NICE (MTG19 2014) to reduce the risk of VTE when other forms of prophylaxis are contraindicated. Geko™ is a battery powered, disposable, neuromuscular electrostimulation device designed to increase blood flow in the deep veins of the leg by stimulating the common peroneal nerve resulting in activation of the calf and foot muscle pumps and therefore increasing blood flow.

3.0 Scope

The Geko™ device will be used for any patients who are at increased risk of venous thromboembolism who would otherwise receive no prophylaxis.

4.0 Main body of the document

The Geko™ device should be prescribed on the patient's drug chart.

The device will need to be applied to both legs (see the diagram below).

4.1 Inclusion group

- Patients who have received LMWH during pregnancy but have discontinued treatment due to ongoing induction of labour (inpatient only)
- Severe pre-eclampsia
- Postpartum Haemorrhage (PPH) where LMWH contraindicated
- Stockings impractical e.g. raised BMI where stocking do not fit
- Low platelets where LMWH contraindicated

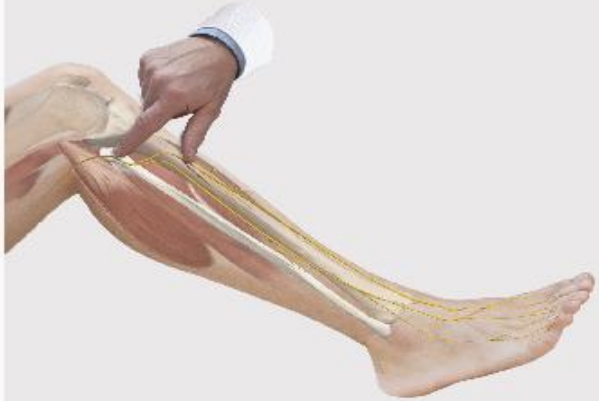
4.2 Fitting instructions

Fitting Instructions

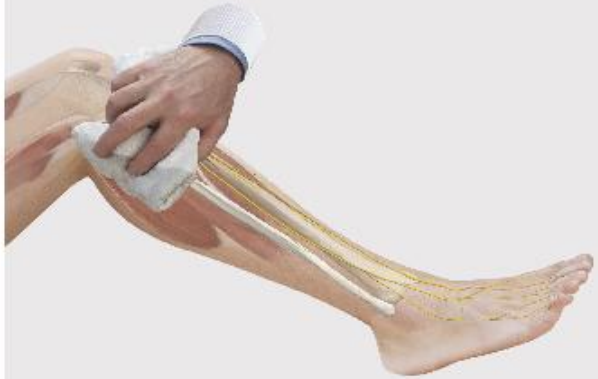
geko™ T-3 / POSTT301-EN March 2020 / gekodevices.com

*Firstkind Ltd is a wholly owned subsidiary of Sky Medical Technology Limited.

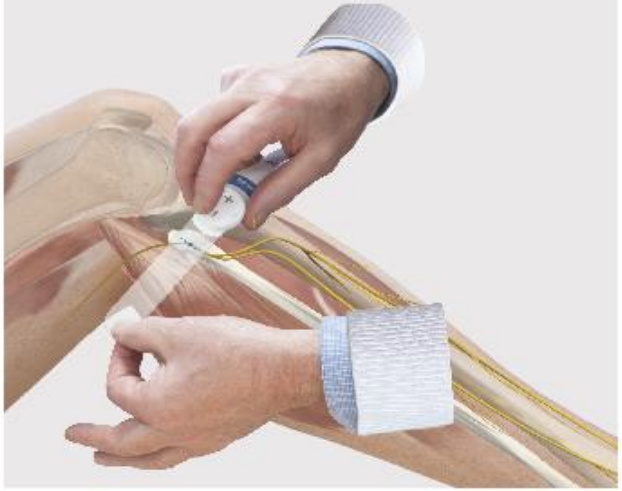
1 Location: The marker line ▸▸●◂◂ on the geko™ device should line up with the fibula head. Fit to both legs and replace the device every 24 hours.
See full instructions for use.



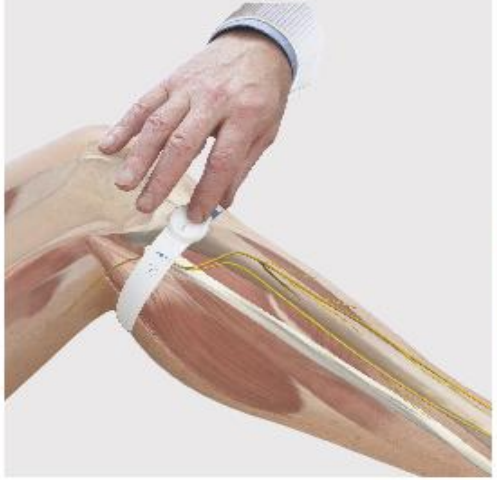
2 Cleaning: Wash and dry the skin where the device will be fitted.



3 Fitting: Remove the film from the geko™ device and place the marker line ▸▸●◂◂ over the fibula head.

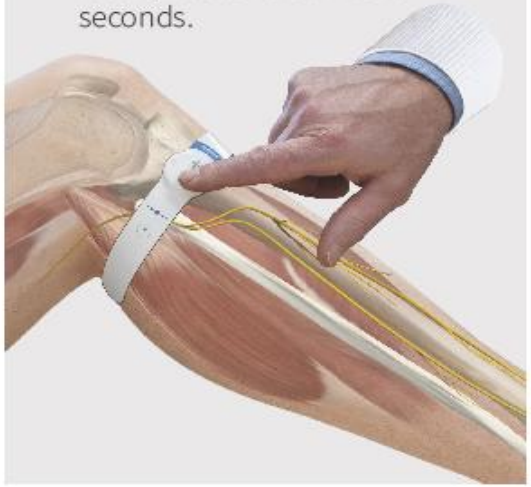


4 Turning On: To turn on, use a short press of the ⊕ button.

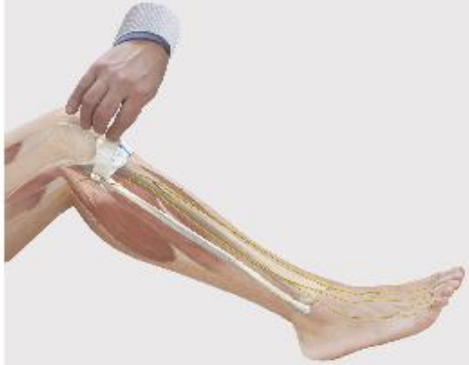


5 Settings: There are 11 settings, shown by the number of times the light flashes before a pause. Use the ⊕ button to increase the setting and ⊖ button to decrease. Increase the setting until you get a rhythmic upwards and outwards movement of the foot.

6 Switching Off: To turn it off, hold ⊖ button down for 3 seconds.



7 Removing: Remove carefully in one piece, to avoid damaging the skin.



4.3 Contraindications to use of the Geko™ device

The Geko™ device must not get wet and must be removed prior to showering.
Geko™ is to be used for inpatient prophylaxis only.

4.4 Risks associated with the Geko™ device

In some cases, skin inflammation or irritation can develop in the contact area. Either remove the device or re-attach in alternative fitting positions if this occurs.

4.5 Documentation in the nursing/midwifery record

Document in the patient records:

- Verbal consent obtained
- Information leaflet provided
- Risks discussed (see above)
- Date and time of application and removal

Complete the audit form

4.6 Removal of the Geko™ device

The Geko™ device is designed to be used for a 24 hour period. There is a 30 hour battery life from the first time it is switched on which enables a 6 hour cross-over allowance.

To dispose of a Geko™ device it is advised to cut the strips off and dispose of them in a clinical waste bin. The battery element should then be placed in a battery bin.

5.0 Roles and responsibilities

5.1 Midwives

It is the midwife's responsibility to adhere to this SOP and ensure they are competent in the application and monitoring of the Geko™ device prior to application.

5.2 Doctors

It is the doctors' responsibility to ensure Geko™ is prescribed for the women who meet the criteria for its use.

6.0 Associated documents and references

Preventative Care for obstetric related VTE: https://www.gekodevices.com/wp-content/uploads/2020/12/Obstetrics-Brochure-V3-DIGI.pdf

Hospital fitting of GEKO device (video): https://www.gekodevices.com/geko-videos/new-geko-device-fitting-instructions-in-hospital-use/

NICE (National Institute for Health and Care Excellence) 2014. The Geko™ device for reducing the risk of venous thromboembolism. Medical technologies guidance. https://www.nice.org.uk/guidance/mtg19/resources/the-geko-device-for-reducing-the-risk-of-venous-thromboembolism-pdf-64371882777541

MBRRACE-UK Saving Lives, Improving Mothers' Care 2020. Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2016-2018. https://www.npeu.ox.ac.uk/assets/downloads/mbrrace-uk/reports/maternal-report-2020/MBRRACE-UK_Maternal_Report_Dec_2020_v10_ONLINE_VERSION_1404.pdf

7.0 Training and resources

The training video (saved on the training shared drive) should be watched and the relevant MDA form should be completed when staff feel competent with using the device.

8.0 Monitoring and audit

Any adverse incidents relating to the guideline for GEKO will be monitored via the incident reporting system. Any problems will be actioned via the case review and root cause analysis action plans. The action plans are monitored by the governance midwife to ensure that improvements in care are made. The trends and any root cause analysis are discussed at the monthly risk meetings to ensure that appropriate action has been taken to maintain safety.

This SOP for use of the Geko™ will be audited in line with the annual audit programme as part of the existing thromboprophylaxis audit, as agreed by the CBU. The audit action plan will be reviewed at the monthly risk management meetings on a quarterly basis and monitored by the risk midwife to ensure that improvements in care are made.

9.0 Equality and Diversity

The Trust is committed to an environment that promotes equality and embraces diversity in its performance as an employer and service provider. It will adhere to legal and performance requirements and will mainstream equality, diversity and inclusion principles through its policies, procedures and processes. This guideline should be implemented with due regard to this commitment.

To ensure that the implementation of this guideline does not have an adverse impact in response to the requirements of the Equality Act 2010 this policy has been screened for relevance during the policy development process and a full equality impact assessment is conducted where necessary prior to consultation. The Trust will take remedial action when necessary to address any unexpected or unwarranted disparities and monitor practice to ensure that this policy is fairly implemented.

This guideline can be made available in alternative formats on request including large print, Braille, moon, audio, and different languages. To arrange this please refer to the Trust translation and interpretation policy in the first instance.

The Trust will endeavor to make reasonable adjustments to accommodate any employee/patient with particular equality, diversity and inclusion requirements in implementing this guideline. This may include accessibility of meeting/appointment venues, providing translation, arranging an interpreter to attend appointments/meetings, extending policy timeframes to enable translation to be undertaken, or assistance with formulating any written statements.

9.1 Recording and Monitoring of Equality & Diversity

The Trust understands the business case for equality, diversity and inclusion and will make sure that this is translated into practice. Accordingly, all guidelines will be monitored to ensure their effectiveness.

Monitoring information will be collated, analysed and published on an annual basis as part of Equality Delivery System. The monitoring will cover the nine protected characteristics and will meet statutory employment duties under the Equality Act 2010. Where adverse impact is identified through the monitoring process the Trust will investigate and take corrective action to mitigate and prevent any negative impact.

Appendix 1

15. Patient Education Leaflet Gecko.pdf

Appendix2
Glossary of terms

BMI Body Mass Index
DVT Deep Vein Thrombosis
LMWH Low Molecular Weight Heparin
PE Pulmonary Embolism
PPH Postpartum Haemorrhage
VTE Venous Thromboembolism

Appendix 3

Maintain a record of the document history, reviews and key changes made (including versions and dates)

Version	Date	Comments	Author

Review Process Prior to Ratification:

Name of Group/Department/Committee	Date
Reviewed by Maternity Guideline Group	02/09/2021
Reviewed at Women's Business and Governance meeting	15/10/2021
Approved by CBU 3 Overarching Governance Meeting	24/11/2021
Approved at Medicines Management Committee (if document relates to medicines)	N/A

Trust Approved Documents (policies, clinical guidelines and procedures)

Approval Form

Please complete the following information and attach to your document when submitting a policy, clinical guideline or procedure for approval.

<table>
<tr><td>Document type (policy, clinical guideline or procedure)</td><td>SOP</td></tr>
<tr><td>Document title</td><td>SOP for the use of the Geko™ VTE prevention device</td></tr>
<tr><td>Document author
(Job title and team)</td><td>Core Labour Ward Midwife and Practice Educator Midwife/ Maternity Guideline Group</td></tr>
<tr><td>New or reviewed document</td><td>New</td></tr>
<tr><td>List staff groups/departments consulted with during document development</td><td>Consultant obstetricians and lead midwives</td></tr>
<tr><td>Approval recommended by (meeting and dates):</td><td><table><tr><td>Reviewed by Maternity Guideline Group</td><td>02/09/2021</td></tr><tr><td>Reviewed at Women’s Business and Governance meeting</td><td>15/10/2021</td></tr><tr><td>Approved by CBU 3 Overarching Governance Meeting</td><td>24/11/2021</td></tr></table></td></tr>
<tr><td>Date of next review (maximum 3 years)</td><td>24/11/2024</td></tr>
<tr><td>Key words for search criteria on intranet (max 10 words)</td><td>GEKO, VTE</td></tr>
<tr><td>Key messages for staff (consider changes from previous versions and any impact on patient safety)</td><td></td></tr>
<tr><td>I confirm that this is the <u>FINAL</u> version of this document</td><td>Name: Charlotte Cole
Designation: Practice Educator Midwife</td></tr>
</table>

FOR COMPLETION BY THE CLINICAL GOVERNANCE TEAM

Approved by (group/committee): CBU3 Overarching Governance Meeting **Date approved: 24/11/2021** **Date Clinical Governance Administrator informed of approval: 10/12/2021** **Date uploaded to Trust Approved Documents page: 14/10/2021**