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Royal Cornwall Hospitals NHS Trust

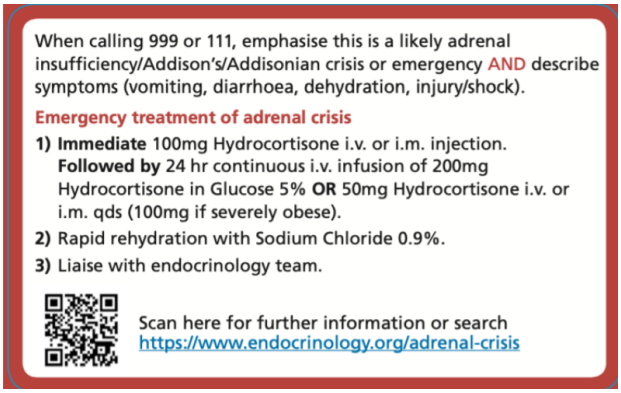
Steroid Emergency Card (Adult) Policy

V1.0

July 2021

Summary

The Steroid Emergency Card supports the early recognition and treatment of adrenal crisis in adults.



Eligible patients are described in the policy.

Prescribers need to ensure eligible patients are issued a Steroid Emergency Card when a steroid prescription is initiated

Prescribers undertaking standard / scheduled reviews must ensure all eligible patients prescribed steroids have been assessed and where necessary issued with a Steroid Emergency Card

On admission to hospital, patients need to be checked for risk of adrenal crisis and establish if a patient has a Steroid Emergency Card.

Omission of steroids must be avoided for patients with adrenal insufficiency as this can lead to adrenal crisis; a medical emergency, which left untreated, can be fatal.

Patients thought to be having an adrenal crisis should be treated promptly as described on the Steroid Emergency Card.

Patients with adrenal insufficiency must be prescribed higher doses of steroids as required, if they become acutely ill or are subject to major body stressors such as trauma or surgery, to prevent an adrenal crisis.

All healthcare professionals should be aware of the patient groups at risk of adrenal crisis.

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Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation

The Trust has a duty under the DPA18 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed and documented. We cannot rely on opt out, it must be opt in.

DPA18 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the DPA18 please see the *Information Use Framework Policy* or contact the Information Governance Team rch-tr.infogov@nhs.net

1. Introduction

1.1. Omission of steroids for patients with adrenal insufficiency can lead to adrenal crisis, a medical emergency which if left untreated can be fatal. The National Reporting and Learning System (NRLS) highlighted four deaths, four patients admitted to critical care and 320 other incidents related to this issue in a two year period. This identified a safety issue which has been followed up nationally.

1.2. The Society for Endocrinology and Royal College of Physicians published guidance on the prevention and emergency management of patients with adrenal insufficiency (2020).

1.3. This was subsequently supported by an NHS England and NHS Improvement, national patient alert promoting the use of a new Steroid Emergency Card to support early recognition and treatment of adrenal crisis in adults (NatPSA/2020/005/NHSPS)

1.4. This national guidance promotes a new patient-held Steroid Emergency Card to be issued by prescribers. This helps healthcare staff to identify appropriate patients and gives information on the emergency treatment to start if they are acutely ill, or experience trauma, surgery or other major stressors.

2. Purpose of this Policy

2.1. The purpose of this policy is to support the implementation of the National Patient Safety Alert issued by NHS England and NHS Improvement: Steroid Emergency Card to support early recognition and treatment of adrenal crisis in adults (NatPSA/2020/005/NHSPS), locally within Royal Cornwall Hospitals NHS Trust.

2.2. The policy should enable staff to recognise which patients need to be provided with a Steroid Emergency Card and how to manage patients with adrenal insufficiency or steroid dependence on admission to hospital.

2.3. Adrenal Crisis should be treated promptly as stated on the Steroid Emergency Card

2.4. The intended outcome is to prevent avoidable harm to those patients at risk of adrenal crisis.

3. Scope

3.1. This policy will apply to all adult patients with primary adrenal insufficiency such as those with Addison's disease, congenital adrenal hyperplasia, and hypothalamo-pituitary damage from tumours or surgery.

3.2. It applies to adult patients with secondary adrenal insufficiency / pituitary disorders who are either on permanent glucocorticoid replacement or require glucocorticoid replacement during illness or stress

3.3. Also included are patients taking exogenous glucocorticoid therapy equivalent to or exceeding the doses described in section 6 of this policy.

4. Definitions / Glossary

4.1. Primary adrenal insufficiency (eg Addison's disease) occurs when the adrenal cortex is damaged and no longer produces enough of the hormones cortisol and aldosterone.

4.2. Secondary adrenal insufficiency occurs when there is damage to the hypothalamic or pituitary pathways resulting in insufficient ACTH to stimulate the adrenal glands.

4.3. Adrenal crisis can also occur in patients with known adrenal insufficiency if existing cortisol replacement does not meet the increased need for cortisol, e.g. due to illness with fever, persistent vomiting or diarrhoea, trauma, childbirth or surgery.

4.4. Eligible patients are those patients with adrenal insufficiency or steroid dependence that fits the requirements for them to carry a Steroid Emergency Card as they will be at risk of adrenal crisis

4.5. Prolonged use of glucocorticoids leads to negative feedback on the hypothalamic pituitary-adrenal (HPA) axis leading to a reduction in endogenous production of glucocorticoids

5. Ownership and Responsibilities

5.1. All Medical, Nursing and Pharmacy staff who liaise with patients regarding steroid treatment have responsibilities within the Steroid Emergency Card Policy. All healthcare professionals should be aware of the patient groups at risk of an adrenal crisis.

5.2. Organisational responsibility for the Steroid Emergency Card policy lies with the Medical Director

5.3. *Role of the Medication Practice Committee*

The Medication Practice Committee is responsible for:

- Monitoring the policy
- Reviewing the policy

5.4. *Role of the Managers*

- Line managers are responsible for ensuring the policy is followed in their area

5.5. *Role of Prescribers*

- Prescribers who initiate steroid prescriptions must ensure that a Steroid Emergency Card is issued to all eligible patients.

- Prescribers undertaking standard / scheduled reviews (eg in clinics or when authorising repeat prescriptions) must ensure all eligible patients prescribed steroids have been assessed, and where necessary issue a Steroid Emergency Card.
- Prescribers who admit, assess, examine or clerk patients must check for risk of adrenal crisis and establish if the patient has a Steroid Emergency Card.
- Prescribers should prescribe steroids promptly in all patients at risk of adrenal crisis assessing whether higher doses are needed if the patient is acutely ill or has experienced trauma or surgery.

5.6. *Clinical Pharmacy Staff*

- Pharmacy staff must check whether the patient has a steroid emergency card as part of the medicines reconciliation process and document this on the EPMA medicines reconciliation note.

5.7. *Role of Pre-Op Assessment Team*

- To record when patients have been issued a Steroid Emergency Card to facilitate the management of their glucocorticoids during the peri-operative period.

5.8. *Role of the Nurses*

- To ensure steroids are administered to the patient as prescribed, avoiding omitted doses.
- To ensure that patients are discharged with their Steroid Emergency Card if they have been issued one.

5.9. *Role of Hospital Pharmacy*

- To have Steroid Emergency Cards available to replace those lost by patients or which become damaged
- To supply a Steroid Emergency Card if requested to do so by a prescriber or member of the Pharmacy Clinical Team

6. Standards and Practice

6.1. *Summary of patients eligible for the Steroid Emergency Card*

If Steroids are prescribed to a patient the prescriber must consider whether the patient should be issued with a Steroid Emergency Card.

The Glucocorticoid equivalence tables in this policy are taken from the supporting material produced by the Specialist Pharmacy Service in conjunction with the Society for Endocrinology and British Association of Dermatologists.

Below are the groups of patients, receiving exogenous glucocorticoids and therefore at risk of Adrenal Insufficiency, who need a Steroid Emergency Card. They should be given cover with hydrocortisone if admitted to hospital unwell or when undergoing a surgical or invasive procedure.

6.1.1. Long-term oral glucocorticoids

Patients taking 5mg prednisolone or equivalent for longer than 4 weeks are at risk of adrenal crisis during acute illness, surgery or other invasive procedures.

Table 1: Long-term oral glucocorticoids (ie 4 weeks or longer)

Medicine	Dose (*)
Beclometasone	625 microgram per day or more
Betamethasone	750 microgram per day or more
Budesonide	1.5mg per day or more (***)
Deflazacort	6mg per day or more
Dexamethasone	500 microgram per day or more (**)
Hydrocortisone	15mg per day or more (**)
Methylprednisolone	4mg per day or more
Prednisone	5mg per day or more
Prednisolone	5mg per day or more

(*) dose equivalent from BNF except (**) where dose reflects that described in the guideline by Simpson et al (2020) and (***) based on best estimate.

6.1.2. Multiple doses of short-term glucocorticoids

It is common in some conditions for patients to have repeated short courses of treatment for example when patients take steroid rescue packs for COPD. In these cases it is important to take and document an accurate medication history for the patient.

Table 2: Short-term oral glucocorticoids (one week course or longer and has been on long-term course within the last year or has regular need for repeated courses)

Medicine	Dose (*)
Beclometasone	5mg
Betamethasone	6mg per day or more
Budesonide	12mg (***)
Deflazacort	48mg per day or more
Dexamethasone	4mg per day or more (**)
Hydrocortisone	120mg per day or more (**)
Methylprednisolone	32mg per day or more
Prednisone	40mg per day or more
Prednisolone	40mg per day or more

(*) dose equivalent from BNF except (**) where dose reflects that given associated Guidance (Simpson et al 2020) and (***) based on best estimate

Patients should be issued with a Steroid Emergency Card if they have had 3 or more short courses of high-dose oral glucocorticoids within the last 12 months, and for 12 months after stopping (see Table 2)

Repeated courses of dexamethasone as an antiemetic in oncology regimens, and for 12 months after stopping (the Steroid Emergency Card should be given on first cycle of dexamethasone) when future cycles are anticipated.

Prolonged courses of dexamethasone (>10 days) for the treatment of severe Covid-19

6.1.3. Intra-articular glucocorticoid injections

Whilst a single intra-articular glucocorticoid injection is unlikely cause an issue consider that patients may be at risk if:

They have received 3 or more intra-articular/intramuscular glucocorticoid injections within the last 12 months, and for 12 months after stopping.

If a patient has major surgery, trauma or intercurrent illness within 28 days of having an intra-articular glucocorticoids steroid injection, then they may be at risk of adrenal insufficiency.

Also a further assessment may be required if on additional steroids via another route such as inhaled steroids.

6.1.4. Inhaled glucocorticoids

The recommendation is to give a Steroid Emergency Card to patients using Inhaled steroids >1000mcg/day beclomethasone or >500mcg/day fluticasone (or equivalent dose of another glucocorticoid), and for 12 months after stopping (see Table 3)

Table 3: Inhaled glucocorticoid doses

Medicine	Dose (*)
Beclometasone (as non-proprietary, Clenil, Easihaler, or Soprobec)	More than 1000 microgram per day
Beclometasone (as Qvar, Kelhale or Fostair)	More than 500 microgram per day (check if using combination inhaler and MART regimen)
Budesonide	More than 500 microgram per day (check if using combination inhaler and MART regimen)
Ciclesonide	More than 480 microgram per day (**)
Fluticasone	More than 500 microgram per day
Mometasone	More than 800 microgram per day (**)

(*) dose equivalent from BNF (1) except (**) where dose reflects that given by London Respiratory Network (3)

6.1.5. Combinations of Routes

Patients taking inhaled corticosteroids at doses described in Table 4 **and** any other form of glucocorticoid treatment including:

- Potent/Very potent topical glucocorticoids,
- intra-articular injection,
- regular nasal glucocorticoids

Table 4:

Medicine	Dose
Beclometasone (as non-proprietary, Clenil, Easihaler, or Soprobec)	800-1000 microgram per day
Beclometasone (as Qvar, Kelhale or Fostair)	400-500 microgram per day (check if using combination inhaler and MART regimen)
Budesonide	400-500 microgram per day (check if using combination inhaler and MART regimen)
Ciclesonide	320-480 microgram per day
Fluticasone	400-500 microgram per day
Mometasone	400-800 microgram per day or more

6.1.6. Topical glucocorticoid creams and ointments:

Patients should be issued with a steroid emergency card if they are on:

Topical high-dose (>/= 200g/ week) potent or very potent glucocorticoids used across a large area of skin for 4 weeks or more, or factors increasing absorption assessed on a case by case basis, and for 12 months after stopping. (see Table 5)

Potent or very potent topical glucocorticoids applied to the rectal or genital areas and used at high dose (more than 30g per month) for more than 4 weeks, and for 12 months after stopping

Table 5 Topical glucocorticoids

Topical steroid treatments	Potency of steroid
Beclometasone dipropionate 0.025%	Potent
Betamethasone dipropionate 0.05% and higher [incl Dalonev, Diprosone, Dovobet, Enstilar, in combination with clotrimazole (incl Lotriderm) and salicylic acid (incl Diprosalic)]	Potent
Betamethasone valerate 0.1% and higher [incl Audovate, Betacap, Betesil, Betnovate, Bettamousse, and in combination with clioquinol, fusidic acid (incl Fucibet, Xemacort) or neomycin]	Potent
Clobetasol propionate 0.05% and higher [incl. Clarelux, ClobaDerm, Dermovate, Etrivex and in combination with neomycin and nystatin]	Very potent
Diflucortolone valerate 0.1% [incl Nerisone]	Potent
Diflucortolone valerate 0.3% [incl Nerisone Forte]	Very Potent
Fluocinonide 0.05% [incl Metosyn]	Potent
Fluocinolone acetonide 0.025% [(incl. Synalar) and in combination with clioquinol (incl Synalar C)]	Potent
Fluticasone propionate 0.05% [incl Cutivate]	Potent
Hydrocortisone butyrate 0.1% [incl Locoid]	Potent
Mometasone 0.1% [incl Elocon]	Potent
Triamcinolone acetonide 0.1% [incl Aureocort]	Potent

6.1.7. CYP3A4 enzyme inhibitors increasing cortisol concentration and risk of adrenal insufficiency

Patients prescribed any form of ongoing glucocorticoid treatment, at any dose, in conjunction with medicines known to be potent CYP3A4 enzyme inhibitors should be issued with a Steroid Emergency card. (except small amounts of a mild or moderate topical glucocorticoid which should be assessed on a case by case basis)

Potent Protease inhibitors:
Atazanavir
Darunavir
Fosamprenavir
Ritonavir (+/- lopinavir)
Saquinavir
Tipranavir

Antifungals:
Itraconazole
Ketoconazole
Voriconazole
Posaconazole

Antibiotics:
Clarithromycin—long term courses only

6.2. *Sick Day Rules Advice*

6.2.1. The information in section 6.1 can be used to determine which patients need to be issued with a Steroid Emergency Card.

6.2.2. The prescriber should also give these patients “Sick Day Rules” so they know what they should do if unwell at home. An increased dose of steroid may be required together with advice when to seek medical help

6.2.3. For more endocrinology resources and information on sick day rules please go to: https://www.endocrinology.org/adrenal-crisis

6.3. *Management of glucocorticoids during surgery*

6.3.1. If further information is required for surgical patients the Guidelines from the Association of Anaesthetists, the Royal College of Physicians and the Society for Endocrinology UK:

6.3.2. Guidelines for the management of glucocorticoids during the peri-operative period for patients with adrenal insufficiency is a recommended resource in the National Patient Safety Alert

Management of glucocorticoids during the peri-operative period for patients with adrenal insufficiency | Association of Anaesthetists

6.4. *Steroid Emergency Card*

6.4.1. The Emergency Steroid Card can be ordered from NHS Forms at NHS Business Services Authority (NHS BSA) http://www.nhsforms.co.uk/

6.4.2. If the prescriber does not have a steroid emergency card available at the time that they are initiating or reviewing steroid treatment, in an eligible patient, one can be obtained from pharmacy by prescribing "steroid emergency card" on an EPMA discharge or out-patient prescription.

6.4.3. Steroid Emergency Cards can also be requested from the clinical pharmacy team on the wards.

6.4.4. A pdf version of the card is also available to download on the Society for Endocrinology webpage

https://www.endocrinology.org/media/3873/steroid-card.pdf

7. Dissemination and Implementation

7.1. Implementation of the policy will be via Trustwide communication and utilising the Governance Leads for all Care Groups.

7.2. The document is available on the document library.

7.3. Significant updates will be communicated via Trustwide email.

8. Monitoring compliance and effectiveness

Element to be monitored	Eligible patients identified as having a Steroid Emergency Card
Lead	Medication Safety Pharmacist
Tool	Audit tool will be used to record patient numbers facilitated by data from EPMA
Frequency	An annual audit will be completed
Reporting arrangements	The report will be sent to both the Pharmacy Governance Group and the Medication Practice Committee
Acting on recommendations and Lead(s)	The Pharmacy Governance Group and the Medication Practice Committee will make recommendations as appropriate and allocate a lead for actions as they arise.
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within a time frame set out in the action plan. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders

9. Updating and Review

9.1. This policy will be reviewed initially after two years or sooner in the light of changes in legislation or practice, then subsequently every three years. The policy review will be ratified by the Medicines Practice Committee when changes are substantial. For minor changes, the chair of the Medicines Practice Committee can approve and re-publish.

9.2. Any revision activity will be recorded in the Version Control Table as part of the document control process.

10. Equality and Diversity

10.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Inclusion & Human Rights Policy' or the Equality and Diversity website.

10.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Document Title	Steroid Emergency Card (Adult) Policy V1.0			
This document replaces (exact title of previous version):	New Document			
Date Issued/Approved:	2nd July 2021			
Date Valid From:	July 2021			
Date Valid To:	July 2024			
Directorate / Department responsible (author/owner):	Ann Cardell, Medication Safety Pharmacist			
Contact details:	01872 253531			
Brief summary of contents	Steroid Emergency Card to support early recognition and treatment of adrenal crisis in adults			
Suggested Keywords:	Steroid Emergency Card, Adrenal Crisis, Steroid, Glucocorticoid,			
Target Audience	RCHT	CFT	KCCG	
	✓			
Executive Director responsible for Policy:	Medical Director			
Approval route for consultation and ratification:	Medication Practice Committee			
General Manager confirming approval processes	Richard Andrzejuk			
Name of Governance Lead confirming approval by specialty and care group management meetings	Kevin Wright, Clinical Support Services			
Links to key external standards	National Patient Safety Alert: Steroid Emergency Card to support early recognition and treatment of adrenal crisis in adults (NatPSA/2020/005/NHSPS)			
Related Documents:	None			
Training Need Identified?	No			
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet & Intranet	✓	Intranet Only	
Document Library Folder/Sub Folder	Clinical / Pharmacy			

Version Control Table

Date	Version No	Summary of Changes	Changes Made by *(Name and Job*
June 2021	V1.0	New document	Ann Cardell Medication Safety Pharmacist

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.
This document is only valid on the day of printing

Controlled Document

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy for the Development and Management of Knowledge, Procedural and Web Documents (The Policy on Policies). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

<table>
<tr><th colspan="6">Section 1: Equality Impact Assessment Form</th></tr>
<tr><td colspan="6">Name of the strategy / policy /proposal / service function to be assessed
Steroid Emergency Card (Adult) Policy V1.0</td></tr>
<tr><td colspan="3">Directorate and service area:
Pharmacy</td><td colspan="3">Is this a new or existing Policy?
New</td></tr>
<tr><td colspan="3">Name of individual/group completing EIA
Ann Cardell, Medication Safety Pharmacist</td><td colspan="3">Contact details:
01872 253531</td></tr>
<tr><td>1. Policy Aim
Who is the strategy / policy / proposal / service function aimed at?</td><td colspan="5">• The policy is aimed at Medical, Nursing and Pharmacy staff who liaise with patients on steroid treatment and as such may be at risk of adrenal crisis.</td></tr>
<tr><td>2. Policy Objectives</td><td colspan="5">• To ensure prescribers issue a Steroid Emergency Card to all eligible patients when initiating steroid prescriptions
• To ensure prescribers undertaking standard/scheduled reviews assess all eligible patients prescribed steroids and where necessary issue a Steroid Emergency Card.
• When patients have acute physical illness or trauma, or who may require emergency or elective surgical or other invasive procedures, including day patients they are checked for risk of adrenal crisis and it is established if the patient has a Steroid Emergency Card.</td></tr>
<tr><td>3. Policy Intended Outcomes</td><td colspan="5">• To prevent harm to patients by supporting the early recognition and treatment of adrenal crisis.
• To prevent omission of steroids for patients with adrenal insufficiency.
• To recognise patients with adrenal insufficiency and manage appropriately when acutely ill or are subject to major body stressors such as from trauma or surgery.</td></tr>
<tr><td>4. How will you measure the outcome?</td><td colspan="5">• Annual Audit
• Monitoring of Incident reports.</td></tr>
<tr><td>5. Who is intended to benefit from the policy?</td><td colspan="5">• All patients with primary adrenal insufficiency, such as those with Addison’s disease, congenital adrenal hyperplasia and hypothalamo-pituitary damage from tumours or surgery.
• Patients who take oral, inhaled or topical steroids for other medical conditions and have secondary adrenal insufficiency and are steroid dependent.</td></tr>
<tr><td rowspan="3">6a). Who did you consult with?

b). Please list any groups who have been consulted about this procedure.</td><td>Workforce</td><td>Patients</td><td>Local groups</td><td>External organisations</td><td>Other</td></tr>
<tr><td>X</td><td></td><td>X</td><td>X</td><td>X</td></tr>
<tr><td colspan="5">Please record specific names of groups:
Medication Practice Committee</td></tr>
<tr><td>c). What was the outcome of the consultation?</td><td colspan="5">Agreed</td></tr>
</table>

7. The Impact

Please complete the following table. If you are unsure/don't know if there is a negative impact you need to repeat the consultation step.

Are there concerns that the policy **could** have a positive/negative impact on:

Protected Characteristic	Yes	No	Unsure	Rationale for Assessment / Existing Evidence
Age		X		
Sex (male, female non-binary, asexual etc.)		X		
Gender reassignment		X		
Race/ethnic communities /groups		X		
Disability (learning disability, physical disability, sensory impairment, mental health problems and some long term health conditions)		X		
Religion/ other beliefs		X		
Marriage and civil partnership		X		
Pregnancy and maternity		X		
Sexual orientation (bisexual, gay, heterosexual, lesbian)		X		

If all characteristics are ticked 'no', and this is not a major working or service change, you can end the assessment here as long as you have a robust rationale in place.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment:	**Ann Cardell, Medication Safety Pharmacist**

If you have ticked 'yes' to any characteristic above OR this is a major working or service change, you will need to complete section 2 of the EIA form available here: Section 2. Full Equality Analysis

For guidance please refer to the Equality Impact Assessments Policy (available from the document library) or contact the Human Rights, Equality and Inclusion Lead india.bundock@nhs.net