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SYMPTOMATIC GLUCOCORTICOID INDUCED ADRENAL SUPPRESSION

Abstract

This study is designed to investigate how many children and young people (<16 years of age) have secondary adrenal suppression and/or the associated adrenal crisis arising as a consequence of taking glucocorticoid medication. The incidence in children and young people in the UK is unknown, but a large study in a Canadian population estimated the incidence as 0.35/100,000 children.

By documenting the number of cases of adrenal crisis in those with adrenal suppression and looking at the background to each event we hope to gather information that can be used to refine the education provided to families and healthcare professionals and reduce the likelihood of patients developing symptoms due to inappropriate management of adrenal suppression in future.

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Background

Adrenal suppression is associated with significant mortality and morbidity in children. This is an important area to study as there is little data regarding hospitalisation in children and adolescents due to adrenal suppression caused by taking glucocorticoids.

Knowledge of the current epidemiology and management of adrenal suppression and adrenal crises in this age group is needed to allow prioritisation and development of new strategies, with the aim of preventing patients with adrenal suppression from becoming unwell or reduce the severity of their illness in future.

Coverage

United Kingdom and Republic of Ireland

Duration

September 2020 to September 2022 (25-months of surveillance).

Research Questions

Primary objective:

Determine the incidence of symptomatic glucocorticoid (GC) induced adrenal suppression in the UK and Ireland.

Secondary objectives:

1. The age, diagnosis and glucocorticoid therapy history in these patients.
2. The interval between presentation to a health-care professional and the administration of glucocorticoid therapy

Case definition

Any case where the clinician has made a clinical diagnosis of adrenal suppression +/- adrenal crisis in children less than 16 years of age.

Reporting instructions

Please report any child seen in the last month who meets the case definition in the UK or the Republic of Ireland regardless of country of birth.

Methods

Paediatricians reporting a case through the orange card system will be sent a questionnaire which explores demographic and clinical information about the child. This questionnaire will be returned either by the REDCap data collection software with a link provided within an invitation email. If a clinician does not wish to use the REDCap data collection software, data can be collected via a Word version questionnaire sent to an NHS.net email address. For clinicians who do not have an NHS.net email address or who do not wish to use electronic communication, questionnaires will be sent out in paper form with a reply (prepaid) envelope.

Ethics approval

North West - Preston Research Ethics Committee (reference: 19/NW/0627); HRA Confidentiality Advisory Group (reference: 19/CAG/0191); and Public Benefit and Privacy Panel for Health and Social Care (reference: 1819-0336).

Support group

Duchenne Research Fund (https://www.duchenne.org.uk/)

Addison's Disease Self-Help Group (https://www.addisonsdisease.org.uk/)

Pituitary Foundation (https://www.pituitary.org.uk/)

Funding

The study is funded through a grant from the Joint Research Executive Scientific Committee at Newcastle upon Tyne Hospitals NHS Charity and the Newcastle Healthcare Charity, and from a grant from Nottingham Hospitals Charity.

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