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Antibody Profiles in Pemphigoid (APP)

Submission date	Recruitment status	[X] Prospectively registered
10/04/2019	Suspended	[_] Protocol
Registration date	**Overall study status**	[_] Statistical analysis plan
27/08/2019	Completed	[_] Results
Last Edited	**Condition category**	[_] Individual participant data
10/08/2020	Skin and Connective Tissue Diseases	[_] Record updated in last year

Plain English summary of protocol

Background and study aims:
Bullous pemphigoid is a rare blistering disorder where the immune system attacks part of the skin. Our goal is to find out more about the causes of bullous pemphigoid and in particular, why the condition affects different people in different ways. We know that bullous pemphigoid is caused by the immune system damaging part of the skin. We do not usually know the trigger for this, although in some people it may be a medication that they have taken. Bullous pemphigoid can look very different from person to person – some may have lots of redness with just a few (or no) blisters, and some may only have widespread blisters but little redness. Some may have both. A recent study in Japan suggested that people with forms of bullous pemphigoid that look different to one another may have damage to different parts of the skin. It is also thought that where a medication is causing bullous pemphigoid, this may look different or give different blood test results. Our study will look into whether adults in the UK also get different types of bullous pemphigoid depending on which part of the skin is affected. We will also look if there are other things that might explain any differences, such as medications that have been taken recently, or underlying differences in the immune system.

Who can participate?
Adults with a diagnosis of active bullous pemphigoid.

What does the study involve?
The study involves a blood test to look in detail at how the immune system is damaging the skin.

What are the possible benefits and risks of participating?
The treatment that a patient receives will not be any different if they take part in the study. The potential risk of physical harm from taking part in the study is that of an additional blood test i.e. a small amount of pain or discomfort and the possibility of bruising.

Where is the study run from?
The study is run from the Leicester Royal Infirmary.

When is the study starting and how long is it expected to run for?
The study will start in August 2019 and is expected to run for up to 2 years.

Who is funding the study?
The study is funded by the University Hospitals of Leicester Dermatology Research Fund.

Who is the main contact?
1. Dr Matthew Scorer (public & scientific contact), matthew.scorer@nhs.net
2. Dr Karen Harman (scientific contact), karen.harman@uhl-tr.nhs.uk

Contact information

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Additional identifiers

Protocol serial number
112816

Study information

Scientific Title
Antibody Profiles in Inflammatory and Non-Inflammatory Bullous Pemphigoid

Acronym
APP

Study objectives
Auto-antibody profile correlates with clinical phenotype in bullous pemphigoid

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 16/01/2020, West Midlands - Coventry & Warwickshire Research Ethics Committee (The Old Chapel, Royal Standard Place, Nottingham HRA1 Meeting Room, NG1 6FS, UK; +44 (0) 207 104 8009; NRESCommittee.WestMidlands-CoventryandWarwick@nhs.net), ref: 19/WM/0292

Primary study design
Observational

Study design
Single-centre cross-sectional observational study.

Study type(s)
Diagnostic

Health condition(s) or problem(s) studied
Bullous pemphigoid

Interventions

The study design is a cross-sectional observational study of patients newly diagnosed with bullous pemphigoid. Patients with clinically suspected bullous pemphigoid will be referred from dermatology clinics or triaged from referral letters. There will be one study visit which will replace the first clinic visit and will include a clinical history, physical examination and assessment with a validated scoring system for documenting clinical findings in bullous pemphigoid (the Bullous Pemphigoid Disease Area Index (BPDAI), venepuncture for blood samples (both usual care investigations and for research purposes), and a skin biopsy under local anaesthetic. The patients will then be followed up with usual care in general dermatology clinics.

Intervention Type
Other

Primary outcome(s)
BPDAI score in two groups: patients with circulating autoantibodies to the juxtamembranous extracellular noncollagenous 16A domain (NC16A) of COL17; versus patients with circulating antibodies to Full COL17 without NC16A, measured by ELISA at baseline.

Key secondary outcome(s)
1. Relative frequency of HLA types and prior exposure to drugs, including DPP-4 inhibitors or other drug classes known to be associated with bullous pemphigoid, in different immunophenotype groups.
We will perform and compare the following tests at baseline assessment:
1.1 HLA type
1.2 Immunoblotting
1.3 Dot blotting
1.4 BP230 ELISA

Completion date
05/08/2021

Eligibility

Key inclusion criteria
1. Willing and able to give informed consent for participation in the study.
2. Aged 18 years or above.
3. Clinical diagnosis of suspected bullous pemphigoid.
4. Direct immunofluorescence on skin biopsy (which is performed as part of usual care) demonstrating linear deposition of IgG and/or C3 at the basement membrane zone reported within 8 weeks of enrolment.
5. Able (in the Investigators' opinion) and willing to comply with all study requirements.

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Sex
All

Key exclusion criteria
1. Alternative diagnosis to bullous pemphigoid at review by a dermatologist.
2. Skin biopsy is judged to be contraindicated for clinical reasons by the Investigator.
3. Direct immunofluorescence of a skin biopsy fails to demonstrate linear deposition of IgG or C3 at the basement membrane zone within 8 weeks of enrolment.

Date of first enrolment
08/09/2020

Date of final enrolment
05/08/2021

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
University Hospitals of Leicester
Infirmary Square
Leicester
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LE1 5WW

Sponsor information

Organisation
University Hospitals of Leicester

ROR
https://ror.org/02fha3693

Funder(s)

Funder type

Hospital/treatment centre

Funder Name
University Hospitals of Leicester NHS Trust

Alternative Name(s)

Funding Body Type
Private sector organisation

Funding Body Subtype
Other non-profit organizations

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be available upon request from Karen Harman (Chief Investigator), available from the email karen.harman@uhl-tr.nhs.uk. The data will be anonymised participant level data on primary and secondary outcome measures, available from the trial end date for a period of 5 years, for the purposes of regulatory review as specified in the participant information sheet and agreed by participants at the time of consent.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023	No	No