

# Immunology and allergy

## A Outpatient and day-case activity

Each unit should produce local plans, and should identify in advance when hospital assessment of outpatients during a pandemic is necessary. Each unit should establish – and communicate – a procedure by which appropriate patients can access the service they require in the event of a pandemic.

### Immunology day-case activity

- ▶ Each unit should establish and communicate a local contingency plan to triage immunodeficient, hereditary angioedema (HAE) and severe allergy patients appropriately – where possible by issuing advice to patients at home, and by enabling home therapy. This should take account of availability of any new therapies which may be of use in this context – eg injectable icatibant.
- ▶ Each unit should have a contingency plan to maintain immunoglobulin supplies and frequency of administration where possible – possibly by facilitating home infusion or home supplies of C1 inhibitor (C1inh).
- ▶ Extra attention should be given to appropriate hand, surface and fomite disinfection to reduce likelihood of influenza spread in departments.
- ▶ Each primary immunodeficiency unit should have measures in place to safeguard those patients at high risk (eg patients with severe cellular or combined immunodeficiency, or those with severe pulmonary disease).

### Allergy day-case activity

- ▶ All procedures (hospital injection immunotherapy and challenge testing) will cease until normal service is restored in the recovery phase.
- ▶ Each unit should have a written policy for managing new patients referred with severe allergies/anaphylaxis – possibly by telephone consultation and issuing of appropriate initial risk management advice remotely.
- ▶ Special consideration will need to be given to continuation of desensitisation for venom-allergic individuals in the up-dosing phase where there may be an increased risk from loss of tolerance. A risk assessment should be made locally, and where necessary contingency plans to continue with desensitisation made in selected cases.

### Immunology laboratory activity

- ▶ Depending on staffing levels, routine laboratory activity may have to be reduced or cease during surge periods and a core list of essential tests for each discipline should be available. Suitably multi-skilled staff may be asked to assist in maintenance of essential testing (these staff should be identified as part of their local laboratory medicine surge planning processes).
- ▶ Specialised testing may have to cease for the period of the pandemic surge.

- ▶ All laboratories should have internal protocols for managing the service in the event of significant staff losses through illness, and difficulties with supply of reagents and transport of specimens.

### **Egg-allergic patients**

- ▶ Flu vaccines should not be given to those who have had a confirmed anaphylactic reaction to a previous dose of the vaccine, or to any component of the vaccine or to egg. In practice such reactions are rare.
- ▶ If patients react to flu vaccine they should be resuscitated following national guidelines. On recovery, a careful history should be taken, documenting the timing of the reaction in relation to the vaccine. An elevated mast cell tryptase is highly suggestive of an anaphylactic reaction and can distinguish syncopal and other states. The same blood sample can be used to test for egg-specific immunoglobulin E (IgE).
- ▶ Specialist advice should be sought from a consultant with training in allergy under these circumstances.

## **B Support and advice for immunodeficient patients admitted for care**

Hospital medical and nursing staff should organise a telephone advice rota to ensure that specialist advice (as appropriate to the scope of the local service) is available to the acute medical teams for care decisions on:

- ▶ immunodeficient patients
- ▶ patients with severe autoimmune disease
- ▶ patients on immunosuppression
- ▶ patients with hereditary angioedema
- ▶ patients with severe allergy.

Known, advanced and irreversible immunocompromise requiring respiratory support will potentially be an exclusion criteria for admission to critical care from A&E or from ward, potentially adversely affecting primary immunodeficiency disease (PID) patients with combined immunodeficiency. Appropriate protocols are required to ensure that PID patients are not disadvantaged unnecessarily.

Under the proposed access/follow-up card system (see Appendix), patients judged to be at high risk will need to be issued with either a Blue Card to indicate their need for remote access to hospital services during the surge phase, or a Yellow Card to enable those who require assessment on site to gain access to the unit (see section E, Management of outpatient clinics).

Centres should consider issuing supplies of oral antibiotics to be held at home to all their immunodeficient patients for initial self-treatment according to existing protocols – as is currently used for geographically isolated patients. Similarly, appropriate supplies of C1inh and rescue medications may need to be issued to selected patients if a pandemic is imminent.

## C Paediatrics

Separate planning will be required to manage paediatric cases by local or regional paediatric immunodeficiency and allergy centres via their paediatric specialists in infectious diseases, immunology or allergy. Appropriate arrangements may be needed to avoid problems in accessing care in adolescent patients in transition between paediatric and adult care.

## D Public information

- ▶ Centres should contact all of their PID, HAE and severe allergy cohort to explain the local plan for managing acute assessment, emergency treatment, infusions and immunoglobulin supplies during the pandemic surge.
- ▶ National patient organisations may be a useful source of advice and support for PID patients.

## E Management of outpatient clinics

### Follow-up outpatients

- ▶ Those at high risk should be contacted by the team at the beginning of the surge so that some follow-up arrangements can be established (in accordance with UKPIN guidance). These patients should be issued with a Yellow Card to identify them as high risk.
- ▶ Each department needs to identify patients on immunosuppressant drugs and develop a system for providing each patient with a request form, reviewing the results, and contacting the patient. These patients should be issued with a Yellow Card to identify them as high risk and enable them to access remote advice and services during a surge. The standard of care for these safety studies may have to be lowered, according to the emergency situation.
- ▶ The phlebotomy service will need planning to ensure that there is a minimal chance of cross-infection between patients. Immunology units may wish to ensure high-risk patients are bled in OP/clinic to reduce risk.

### Specific information to add to the Yellow and Blue Access/Follow-up Cards

- ▶ Useful information may be found on the following websites:
  - your local health trust
  - Department of Health (DH): [www.dh.gov.uk](http://www.dh.gov.uk)
  - Health Protection Agency: [www.hpa.org.uk](http://www.hpa.org.uk)
  - UK Primary Immunodeficiency Network (UKPIN): [www.ukpin.org.uk](http://www.ukpin.org.uk)
  - Primary Immunodeficiency Association (PiA): [www.pia.org.uk](http://www.pia.org.uk)
  - Allergy UK: [www.allergyuk.org](http://www.allergyuk.org)
  - Anaphylaxis Campaign: [www.anaphylaxis.org](http://www.anaphylaxis.org)

- ▶ Your contact number for the immunology/allergy clinic is: [insert appropriate telephone number]. We will try to give you advice by telephone where appropriate.
- ▶ Queries about immunoglobulin supplies can be made using the following number: [insert appropriate number].

### **New outpatient appointments**

All appointments may be delayed by up to four months, with the exception of high-priority cases outlined in section F below. Initial risk management of allergy patients (avoidance, issuing of EpiPens, dietary avoidance advice etc) may be possible by letter or telephone consultation.

## **F Specialty priorities for outpatient review**

Immunology and allergy symptoms or illnesses that are likely to be considered priorities are:

- ▶ severe immunodeficiency
- ▶ severe and uncontrolled HAE
- ▶ severe and uncontrolled allergy/idiopathic anaphylaxis
- ▶ severe autoimmunity or vasculitis with signs of relapse/deterioration
- ▶ established immunodeficiency with new complication requiring specialty consultation.

Priority patients will be identified by the clinical teams and will be notified by the issuing of appropriate information, including letters and either a Yellow or Blue Card.

### **Priorities for follow-up of established outpatient attenders**

- ▶ Vasculitis (confer with rheumatology specialty advice) with high risk of acute deterioration or significant organ involvement
- ▶ Severe PID
- ▶ Severe HAE
- ▶ Severe recurrent anaphylaxis despite avoidance
- ▶ Severe intercurrent infections unresponsive to first line oral antibiotics or showing signs of acute deterioration.

### **Priorities for new patient appointments**

Examples of new life-threatening or severe symptoms that should be referred for outpatient consultation are:

- ▶ angioedema affecting breathing
- ▶ severe and recurrent anaphylaxis
- ▶ new severe immunodeficiency.

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Joint Committee on Immunology & Allergy