ALLERGIES-INCLUDING ASTHMA, ECZEMA AND HAY FEVER

Monday 23rd February
7.30-9pm
WELCOME AND INTRODUCTIONS

- Mary Adams (Patient and Public Engagement Manager, North Somerset CCG)
- Mary Edmunds (Practice Nurse)
- Matthew Ridd (GP)
- Robin Pullen (GP)
- Gerwyn Owen (GP)
RUNNING ORDER

- Allergies and Atopy including Hay Fever
- Asthma-what it is and how we manage it
- Eczema-particularly with relation to childhood
- Questions
ALLERGY, ATOPY AND ALLERGIC RHINITIS

Portishead Medical Group
February 2015
OBJECTIVES

- What is Allergy?
- Different types of Allergy
- What Allergy is not
- Atopy
- Diagnosis
- Treatment
- Seasonal Allergic Rhinitis (Hay Fever)
- Questions
WHAT IS ALLERGY?

- An allergy is the inappropriate response of the body's immune system to normally harmless substances (allergens), such as pollens, foods, and house dust mite.

  - affects up to 25% of the population (50% children)
  - common allergens – tree and grass pollen, peanuts, tree nuts, milk, soya, eggs, house dust mite faeces, moulds, pet dander, wasps & bees and medicines
  - common forms of allergy are asthma, atopic eczema, hay fever and food allergy
DIFFERENT TYPE OF ALLERGY 1

- **IgE mediated Allergy** -
  - rapid onset
  - requires sensitization, allergens and antibodies
  - Allergen + IgE antibodies bound to mast cells = histamine release
  - Mast cells present in skin, nose, eyes, mouth, throat, stomach and gut.
  - Causes itch, irritation, sneezing, oedema, hives & wheals, wheeze, D&V - if severe – anaphylaxis
  - Includes asthma, hay fever and food allergies
DIFFERENT TYPE OF ALLERGY 2

- Non-IgE mediated Allergy
  - Slower onset- hours to days
  - Cell mediated rather than antibodies
  - Less well understood
  - Includes contact allergic dermatitis (i.e. poison ivy, nickel) and some food allergies including to milk & soya that may cause eczema, diarrhoea, reflux, colic, and rarely constipation or faltering growth
  - Gluten allergy (coeliac disease) is another example
  - Never causes Anaphylaxis
WHAT ALLERGY IS NOT

- By definition allergy has to include the body's immune system
- Conditions that may mimic allergy but do not involve the immune pathway include
  - Contact irritant dermatitis - detergents etc
  - Food intolerance - dose dependent and may include
    - Histamine containing foods (marmite!)
    - Vasoactive amines (migraine triggers) chocolate, cheese and red wine
    - Sulphite Sensitivity and MSG
ATOPY

- This is the genetic predisposition to developing allergic disease
- Maternal atopy most important
- Half of children with an atopic family will develop allergic diseases (verses 20% in background population)
- Family history does not determine severity or type of allergic disease likely to suffer from.
DIAGNOSIS

- If you suspect an allergy –
  - The history is most important
    - Temporal relation to any allergen
    - Related to time of day/time of year
    - Better or worse at work/school or inside/outside
    - Reaction to animals
    - Reproducibility of symptoms with same allergen
  - Tests- must be guided by history and potential allergen- **no such thing as an allergy test**
    - Patch testing for skin condition (non IgE mediated)
    - Skin Prick Testing or Specific IgE (RAST) blood test
    - Results need careful interpretation
TREATMENT

- May be spontaneous resolution - especially food allergy in children - milk, eggs, soya, wheat (less so peanuts, tree nuts, shellfish). Declines from 8% to 1% in adulthood.
- Allergen avoidance - essential and only practical response to food allergy. Avoiding other allergens is difficult (pets).
- Medication
  - Antihistamines - topical and systemic
  - Steroids - topical and systemic
  - Adrenaline - for anaphylaxis
  - Emollients
  - Others
- Immunotherapy - desensitization
SEASONAL ALLERGIC RHINITIS (HAY FEVER)

- Inflammation of the nose (often also the eyes) due to an allergic response to pollen-usually grass and tree (esp. Birch in March, April, May)
- Combination of sneezing, discharge and blocking lasting >1 hour on most days
- Affect 25% of the population
- Co-morbidity with asthma
SEASONAL ALLERGIC RHINITIS TREATMENT 1

- Avoidance
  - Stay indoors especially late afternoon
  - Sleep and drive with windows closed
  - Dry clothes inside, wash clothes that have been used outside
  - Shower pollen out of hair
  - Wear wrap-around sunglasses
  - Holiday in coastal areas
  - Listen out for pollen count forecasts
SEASONAL ALLERGIC RHINITIS TREATMENT 2

- Medication- start before symptoms if possible
  - Oral Antihistamines
  - Topical Nasal Steroids- **Must be used Properly**
  - Cromoglycate eye drops
  - Short term course of oral steroids for severe sympt
  - Less commonly- nasal decongestants, nasal antihistamines and leukotriene inhibitors
- Sublingual desensitization immunotherapy- to grass pollen using Grazax
QUESTIONS?

Further information available at the Allergy UK website
http://www.allergyuk.org/
ASTHMA – CAUSES & MANAGEMENT

Presented by
Practice Nurse
Mary Edmunds
WHAT IS ASTHMA?

- Asthma is a condition that affects the airways.
- When a person with asthma comes into contact with an asthma trigger the muscles around the walls of the airways tighten and the airways become narrower.
- The lining of the airways becomes red and swollen and mucus is produced.
- All these reactions cause the airways to become narrower and irritated.
- Common symptoms are: Coughing, Wheezing, Shortness of breath, Tightness in the chest
INSIDE THE AIRWAYS

Normal Airways

- Mucus gland
- Airway
- Muscle layer

Asthma Airways

- Inflamed Airways
- Mucus fills airway
- Muscle layer tightens around airway
WHAT CAUSES ASTHMA?

- It is difficult to know the specific causes.
- Asthma can start at any age

- If one or both of your parents have asthma you are more likely to have it
- Modern lifestyles eg. Changes in housing, diet, and a more hygienic environment may have added to the rise in asthma
- Smoking during pregnancy increases the chance of a child developing asthma
- Other causes:
  - Being exposed to cigarette smoke
  - Irritants in the workplace such as dust and chemicals
  - Environmental pollution
ASTHMA TRIGGERS

- A trigger is anything that irritates the airways and causes the symptoms of asthma
- Everyone’s asthma is different and individuals may have more than one trigger that causes the symptoms
- Common triggers are:
  - Colds and flu
  - Tobacco smoke
  - Exercise
- Stress/emotion
- Changes in air temperature
- Some chemical fumes
- Pollen
- House dust mites
- Pollution
Perfumes

Mold and damp

..................................and also.........................
FUR AND FEATHERS
HOW IS ASTHMA TREATED?

- The most effective way of taking asthma treatments is to inhale the medicine so that it get straight into your lungs.

- There are two types of Asthma medicine:
  - Relievers
  - Preventers
RELIEVER INHALERS

- Usually **BLUE** and taken when you have asthma symptoms
- They work quickly by relaxing the muscles surrounding the narrowed airways making it easier to breathe

- You should always carry the reliever inhaler with you

- If you start to use your reliever three to four times a week there is a risk that it will become less effective and your asthma may worsen
- This may indicate that you need to take a preventer inhaler as well
PREVENTER INHALERS

- These are usually **BROWN** **RED** or **ORANGE**
- They work by controlling the swelling and inflammation in the airways reducing the risk of severe attacks
- The effect of preventer inhalers builds up over time and must be taken every day, usually morning and evening
- You must take your preventer medication every day, even if you are feeling well
- Preventers contain a steroid medicine but it is not the same as anabolic steroids taken by athletes
COMBINATION INHALERS

- These are usually RED WHITE or PURPLE, and as the name suggests, they contain both reliever and preventer medication.

- They are often prescribed if the preventer inhaler is not controlling the symptoms

- The combination inhaler also needs to be taken daily, usually morning and evening, even if you are feeling well.
TYPES OF INHALER DEVICES AND SPACERS

- Pressurised Metered dose inhaler
- Breath actuated
- Powder inhaler
By avoiding the triggers that make your asthma worse, and by taking your asthma medication correctly, you can reduce your symptoms and continue to enjoy your usual lifestyle.

- Remember to attend your annual asthma checkup
- Have the flu vaccination
ECZEMA: THE BASICS

Dr Matthew Ridd
Associate GP, Portishead Medical Group
Senior Lecturer, Centre for Academic Primary Care, University of Bristol
AIMS

- To cover the basics of diagnosis and treatment
- To identify where to find more information/help
- To invite your help in improving how this condition is looked after in primary care
Diagnosis
- Itchy, dry skin
- Distribution
- Pre-school

Assessment
- Physical
- Quality of life/psychosocial
## Types of Emollients

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leave-on emollients (directly applied emollients)</td>
<td>Where emollients are applied to the skin and left to soak in</td>
</tr>
<tr>
<td>Soap substitutes</td>
<td>Where emollients are used instead of soap or other washing products</td>
</tr>
<tr>
<td>Bath emollients (bath additives)</td>
<td>Oil and/or emulsifiers disperse in the bath</td>
</tr>
</tbody>
</table>
# Emollient Types

## Light

<table>
<thead>
<tr>
<th>Lotions</th>
<th>Cream</th>
<th>Gels</th>
<th>Ointments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aveeno</td>
<td>E45</td>
<td>Doublebase</td>
<td>Epaderm</td>
</tr>
<tr>
<td>Dermol</td>
<td>Diprobase</td>
<td></td>
<td></td>
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<tr>
<td>Cetraben</td>
<td></td>
<td></td>
<td></td>
</tr>
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## Heavy

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<td>Hydromol</td>
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</table>
EMOLLIENT CHOICE & USE

Choice: trial & error
- Disease severity
- Packaging & quantity
- Patient preference
- Co-prescribing

Directions & cautions
- “Regularly”
- Direction of application

Problems
- Recurrent “infection”
- Stinging
MANAGING ‘FLARES’

- Use of topical corticosteroids
- Use of antibiotics
TOPICAL CORTICOSTEROIDS

Mild
- **Hydrocortisone** 0.1–2.5%, *Dioderm, Mildison, Synalar 1 in 10 Dilution*

Moderate
- **Betnovate-RD, Eumovate, Haelan, Modrasone, Synalar 1 in 4 Dilution, Ultralatanum Plain**

Potent
- Beclometasone dipropionate 0.025%, Betamethasone valerate 0.1%, *Betacap, Bettamousse, Betnovate, Cutivate, Diprosone, Elocon*, Hydrocortisone butyrate, *Locoid, Locoid Crelo, Metosyn, Mometasone furoate 0.1%, Nerisone, Synalar*

Very potent
- **Dermovate, Nerisone Forte**
TIPS FOR USING TOPICAL CORTICOSTEROIDS

- Allow a gap between application of a topical corticosteroid and an emollient.
- Finger-tip unit = 0.5 g = two adult hands
- A short treatment with a potent topical corticosteroid is likely to be as effective as a longer treatment with a mild preparation.
- Once daily treatment is as effective as more frequent applications.
- ‘Weekending’ may help maintain control
WHEN SHOULD WE USE ANTIBIOTICS?

Topical or oral?
ECZEMA HERPETICUM

- Areas of rapidly worsening, painful eczema
- Clustered blisters consistent with early-stage cold sores
- Punched-out erosions (circular, depressed, ulcerated lesions) usually 1–3 mm that are uniform in appearance (these may coalesce to form larger areas of erosion with crusting)
- Possible fever, lethargy or distress.
## TREATMENT ESCALATOR

<table>
<thead>
<tr>
<th>Atopic eczema severity</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild potency corticosteroids</td>
<td>Emollients</td>
<td>Emollients</td>
<td>Emollients</td>
</tr>
<tr>
<td>Moderate potency corticosteroids</td>
<td>Topical calcineurin inhibitors</td>
<td>Topical calcineurin inhibitors</td>
<td>Potent topical corticosteroids</td>
</tr>
<tr>
<td>Severe</td>
<td>Systemic treatment</td>
<td>Phototherapy</td>
<td>Bandages</td>
</tr>
</tbody>
</table>
TREATMENTS NOT RECOMMENDED

X evening primrose oil
X probiotics (for established eczema)
X homeopathy
X Exclusion diets (unless clear evidence of allergic response)
X Aqueous cream
X Water softeners
PARENTS’ VIEWS OF CHILDHOOD ECZEMA

- Main cause of treatment failure is non-concordance with topical treatments
- Mismatch in agendas between parents and health care providers
- ‘Trial and error’ prescribing can be bewildering to parents and feel like being ‘fobbed off’
- Mixed messages from health professionals about topical steroids
- ‘Control not cure’ difficult to accept for parents
DIET, ALLERGY AND CAM

- Most families try dietary exclusions without discussion with health professional
- Food allergy is unlikely if eczema is mild or does not affect most of body or develops after 2 years of age
- Milk and eggs are the most common allergies in babies
- Allergy testing is not useful in eczema
We are the only charitable organisation in the UK dedicated to improving the quality of life for people with eczema and their carers.

Get support

- Learn more about eczema
- Speak to someone: 0800 089 1122
- Visit our shop

Norwich launches Helpline Live 2012!

About Eczema

Find out what eczema is as well as the types, treatments and resources to read and download.

Treatment

Keeping skin moisturised using emollients (medical moisturisers) is key to managing all types of eczema with topical steroids commonly used to bring flare ups under control.
Eczema Outreach Scotland
Supporting people with eczema and their families

ORG.UK
INFO@ECZEMAOUTREACHSCOTLAND.CO.UK
FREE LINE 0800 622 6018
OFFICE TEL 01506 840 395
TEXT 07 8070 4 8070
LIKE US ON

Registered Charity SC042392
RESEARCH STUDIES

- Choice of Moisturiser for Eczema Treatment (COMET)
- Bath emollients (BATHE)
- Action Plans for Children with Eczema (APACHE)

- Antibiotics for infected eczema (CREAM)

- Emollients for the prevention of eczema (BEEP)
- Silk clothing (CLOTHES)
TAKE HOME MESSAGES

- Treatment
  - Control, not cure
  - Emollient, emollients, emollients
  - Safe and confident topical corticosteroid use

- Patient resources

- Importance of on-going research (PPI)
  - m.ridd@bristol.ac.uk
  - @riddmj
Any final questions
Thanks
Become part of our planning group
Feedback
Have a safe journey home