PAEDIATRIC OUTPATIENTS DEPARTMENT

Student Learning Package

Contents

Introduction to Paediatric Outpatients Department

Welcome to the Paediatric Outpatients Department!

The Team are :

Sister Nicola Entwistle– Manager

SN Carmen Read – Staff Nurse

SN Tracy Little – Staff Nurse

SN Nazneen Member – Staff Nurse

SN Becky Fucile – Staff Nurse

SN Moira Seaward – Staff Nurse

SN Pauline Horrocks – Staff Nurse

SN Sue Rawcliffe – Staff Nurse

HCA Linda Nichols-Senior Health Care Assistant

HCA Suzanne Havercroft-Senior Health Care Assistant

HCA Wendy Margerison-Health Care Assistant

HCA Jeanette Weir – Health Care Assistant

Reception Staff

Catherina – Booking Management – Supervisor

Chrissy

Ashleigh

Jo

Alicia

Rachel

Background

The Children's Outpatient Department is situated on the ground floor of Lancashire Teaching Hospital. We are the yellow canopied entrance to the left of the main hospital entrance.

The department consists of:

Reception area

Childrens/adolescent play/waiting area

Toilets

Treatment room

Sister's office

Nurses'office

10 consultation rooms

Service Provision

The paediatric clinical services are delivered for children between the ages of 0-16 years (the exception being some neurology, diabetic and cystic fibrosis patients – the consultant often sees these up until the age of 18yrs).

Children with complex needs/long term conditions can stay with the paediatric team until they are discharged from mainstream education. Transitional care is an ongoing process with the Directorate.

General Paediatric clinics are run by Paediatricians and Baby clinics are run by Neonatologists. Three general paediatricians cover both areas.

The clinics are held by paediatricians who have experience in a variety of specialities – some of which come from other departments/hospitals. There are also 'Nurse-led clinics' within the department.

The clinic opens at 8am – 6pm Monday – Friday. Some days the clinic is open until 8pm for late clinics.

Paediatricians

Dr O Connor Dr Madhavi Dr Mahmood Dr Rengan Dr Shetty

Dr Padhaye Dr Sugumar Dr Sugden Dr Ayoola Dr Turner Dr Kandasamy

Neonatologists

Dr Gupta Dr Dharmaraj Dr Narasimhan Dr Duggan Dr Egbeama

Dr Makhalira Dr Santa

Paediatric Neurologists

Dr De Goede Dr Basu Dr Kattakayam

Consultants not covering weekly rotation of on-call.

Dr Foster – Rapid Access and Paediatric Assessment Unit.

Dr Kendall – Endocrine and Diabetes

Community Paediatricians

These clinicians are based in the Child Development Centres at Preston and Chorley.

Dr Das

Dr Kattakayam-specialist in epilepsy

Dr Agbenu – Tone management

Dr Hall – Immunisation and Vaccination

Dr Das Gupta

In-house Consultants who undertake paediatric clinics within the department

Mr McEvoy – Orthopaedic Surgeon – Children's only orthopaedics

Dr Francis – Gynaecologist – Paediatric Gynaecology

Visiting Clinicians from our tertiary Children's Hospitals

Alder Hey Children's Hospital

Mr Baillie – Paediatric Surgeon.

Mr Van Eden – Cleft Lip and Palate Network -Facio-maxillary surgeon-specialises in cleft lip/palate

Dr Shauq – Consultant Cardiologist

Central Manchester Children's Hospital

Mr Kamaly - Paediatric Neurosurgeon

Dr Banka-Clinical Genetics

Professor Clayton – Smith – Clinical Genetics

Dr Hughes – Paediatric Immunology/Allergist

Learning opportunities and overview of clinic activity – Focus for students learning.

Babies children and young people are referred into paediatric clinic because of medical problems occurring outside of the routine childhood illnesses, some patients are seen following acute admissions to the children's' ward or as shared care follow up with our tertiary care providers.

The patient pathway and booking process is an area of learning that you are expected to explore and discuss with your mentor!

Signpost – National Service Framework for Children and Young People – Standards for Hospital Services. Children seen in adult areas! Children's only clinics, theatre lists, Children in a district general hospital, Paediatric nurses role and training, governance, safe standards of care, family centred care, 'the whole child continuum' Current evidence policy drivers that influence service delivery for our paediatric patients. You should be familiar with these from your Paediatric training.

Booking Management Service, triage of referrals, access to services, specialities, services delivered locally, shared care, rapid access clinics.

The Play Service

The Play team are regular visitors to Children's Clinic

The play team consists of two play specialists and two play leaders. As part of the MDT on the unit the team will help support children/young people and their families during their

stay/visit to hospital. We carry out lots of types of play ensuring each individual child/young adult's developmental needs are met.

Preparation – Play preparation is used to inform children about the hospital environment, surgery or treatments and procedures they are going to experience. Through play preparation we can correct any misconceptions the child may have. A child that understands is more able to cope and therefore is less likely to suffer from stress and anxiety. Procedures can be explained by the use of books, dolls, puppets, photograph and DVD's.

Distraction – The play service also offers distraction/diversional techniques when children are undergoing any kind of medical procedure. This helps to divert their attention away from their anxieties and pain by the use of suitable distraction materials such as bubbles, iPad, books, games etc. The more absorbed a child is during distraction the more pain or discomfort can be reduced therefore helping the child to cope and accept a treatment.

<u>Cardiac Clinics</u>

Dr Mahmood (Lead Clinician) and Dr Rengan -– patients aged 6 months –discharge (sometimes 18/19 years).Dr Egbeama – Neonatology – Babies up to the age of 6 months (neonatal unit).

Dr Shauq attends monthly to see babies with more complex heart conditions, many of them are post-operative or awaiting surgery at Alder Hey.

There are many cardiac conditions affecting children. There is a display in room 2 – a valuable patient information resource for parents, staff and students…

The baby/child will have a heart scan whilst in clinic and this is carried out by the Consultant. The consultant may request that the nurse does an ECG. Depending on the age/condition of the baby/child it may also be necessary to obtain the weight, B.P and oxygen saturations.

What is an ECG?

Why would a child need one?

What does the test look for?

Look at the guideline, standards for children, competency, explain it to parents,

Depending on the age/condition of the baby/child it may also be necessary to obtain the weight, B.P and oxygen saturations.

Why would we need to do that?

Signpost - ASD/VSD – heart murmur – What does this stand for:

Babies / children can present with an audible murmur on auscultation. Dependant on severity babies can present with poor feeding, breathlessness, fail to thrive.

Tetrology of fallots, Pulmonary Atresia, Coarctation.

Transposition of the great arteries. (to name but a few)!

Common drugs used in cardiology:

Frusemide, spironolactone, Adenosine.

MDT liaison, impact on child and family,

Read EVOLVE, follow the patient journey of a child post cardiac surgery. Talk

Further Reading

British Heart Foundation website www.bhf.org.uk

https://www.bhf.org.uk/**heart**-health/.../congenital-**heart**-disease

Alder Hey Children's Hospital – website – cardiology

www.**alderhey**.nhs.uk/.../Paediatric-**Cardiac**-Specialist-**Service**-PIAG-36.pdf

Diabetic Clinic

Dr Ayoola – Lead Consultant – RPH patients 13-15 years and Teenage Adolescent patients.

Dr Kendall – 0 – 12 years RPH and all ages at CDH.

There are over 200 children and young people under the care of paediatrics at LTHTR with Type 1 Diabetes; there are a small number with Type 2 diabetes. We usually have about 20 new diagnoses each year.

The diabetic clinics are multidisciplinary involving the consultant, diabetic specialist nurses, and dietician and clinic nurse. There should be a clinical psychologist.

Signpost – Diabetes year of care – Best practice tariff £3200 per year approximately.

4 Consultant reviews per year in clinic.

4 HBA1c readings per year, blood glucose monitoring (Diasend)

Diabetes Annual Screen – WHO, foot screen, eye screen, bloods BP.

Structured Education – written care plans, patient information, sick day support, hypo's, when you are unwell. 24 hour helpline contact with acute area (PAU).

NICE guidance –NG18 – August 2015 review -

Continuous subcutaneous insulin infusion (NICE technology appraisal guidance 151 – published 2015)

A teenage evening clinic runs on alternate Mondays. This is so that the teenagers can come to clinic outside of school hours. They are also encouraged to see the team without their parents which enables them to develop independence.

A transitional clinic is put on a few times a year. This is a clinic where the teenager and family can meet the adult clinician who will manage their diabetes for the rest of their adult life.

Signpost – What does having Diabetes mean for a child and family

Read EVOLVE records

Talk to the family, diagnosis, acute presentation, support, school,

Life long illness, complications, why do we have Best practice standards

Psychological and social issues - impact, injections, Long Term complications, diet and nutrition, school, exercise,

Specialist nurses, MDT, support, Targeted HBA1c,

Further reading

Diabetes UK – Care, connect, campaign. www.diabetes.org

NHS Diabetes Commissioning Documents and Guidance https://www.diabetes.org.uk/About_us/What-we-say/NHS-Diabetes-commissioning-documents-guidance/ Links to all the policy documents related to Paediatric Diabetes

https://www.diabetes.org.uk/Documents/Reports/Diabetes_Type_1_in_childhood_exemplar.pdf

www.diabetes.nhs.uk

Report of the Children and Young People's Health Outcomes Forum (2012)

Paediatric Phlebotomy Service

Blood Test Clinics

Blood tests are an important part of working in paediatric out – patients.

All band 5 SN's and Band 3 HCA's staff are trained in venepuncture. Some of the children require a blood test after a clinic consultation, but others may be required to return for a blood test at a later date. Blood test clinics are scheduled every week.

Referrals for the bloods can be sent through the paediatric phlebotomy service. These may come from the paediatricians /other consultants, G.P.s and some specialist nurses . There is a protocol for the G.P blood referrals.

The blood referrals are booked by a receptionist with guidance/ advice from the nursing staff.

The blood test clinics provide learning opportunities for the students

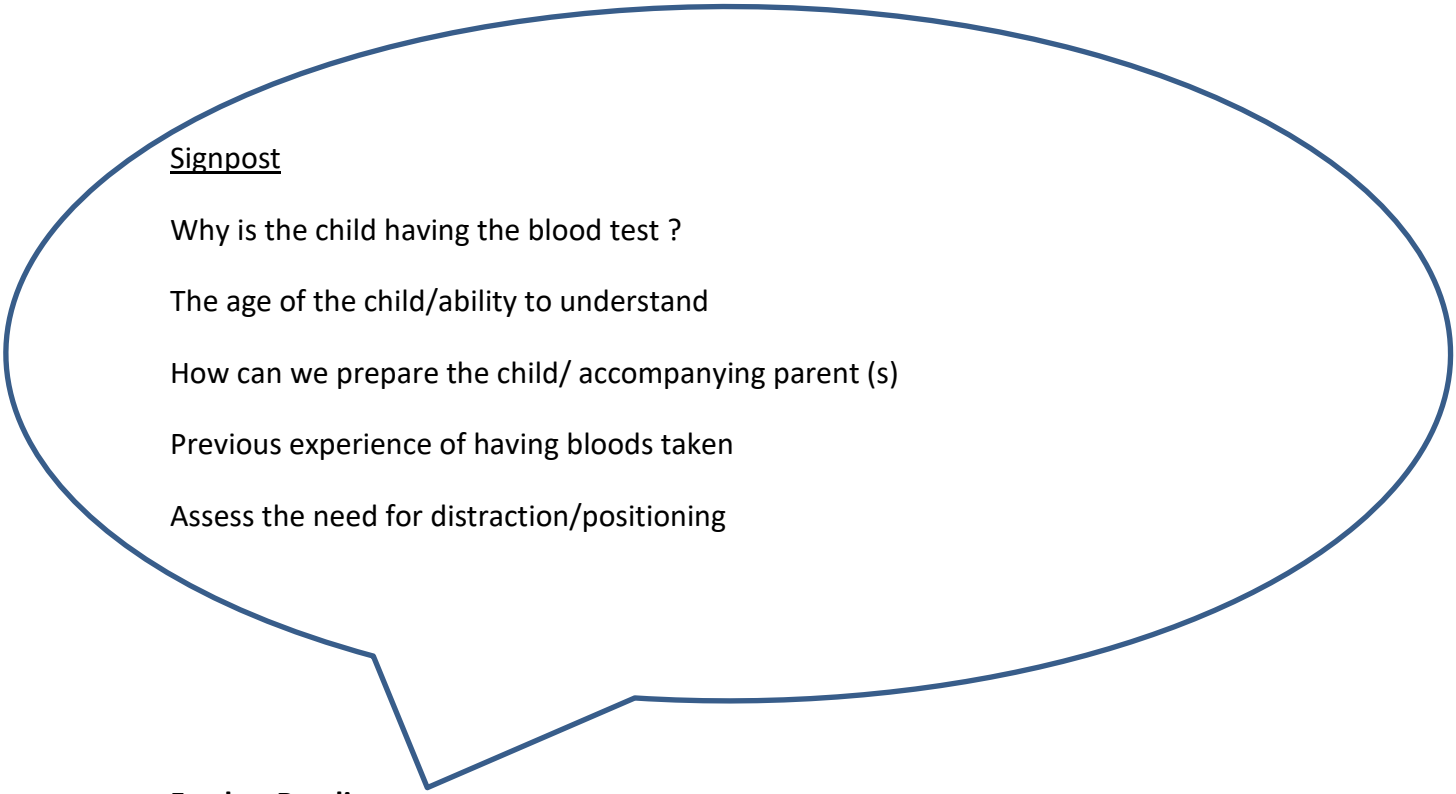
The Play Service

The Play team are regular visitors to Children's Clinic

The play team consists of two play specialists and two play leaders. As part of the MDT on the unit the team will help support children/young people and their families during their stay/visit to hospital. We carry out lots of types of play ensuring each individual child/young adult's developmental needs are met.

Preparation – Play preparation is used to inform children about the hospital environment, surgery or treatments and procedures they are going to experience. Through play preparation we can correct any misconceptions the child may have. A child that understands is more able to cope and therefore is less likely to suffer from stress and anxiety. Procedures can be explained by the use of books, dolls, puppets, photograph and DVD's.

Distraction – The play service also offers distraction/diversional techniques when children are undergoing any kind of medical procedure. This helps to divert their attention away from their anxieties and pain by the use of suitable distraction materials such as bubbles, iPad, books, games etc. The more absorbed a child is during distraction the more pain or discomfort can be reduced therefore helping the child to cope and accept a treatment.



Signpost

Why is the child having the blood test ?

The age of the child/ability to understand

How can we prepare the child/ accompanying parent (s)

Previous experience of having bloods taken

Assess the need for distraction/positioning

Further Reading :

Restraining policy - LTHTR

A.N.T.T. policy - LTHTR

Handwashing policy - LTHTR

Paediatric phlebotomy referral policy/website

Consent policy – LTHTR

Day Case Surgery

Mr Baillie is a paediatric surgeon who comes to Preston from Manchester on alternate Fridays. He operates on a Friday morning and does his clinic in the afternoon.

Some of conditions that Mr Baillie sees are hernias, undescended testicles, cysts, constipation, in growing toe nails (sometimes these may require E. U. A. under G.A) and various other conditions.

If a child requires to be listed for surgery , a nurse will carry out the pre-operative preparation in clinic. The play team are also available to provide age related preparation.

Further reading:

Chaperone policy

Pre-operative fasting

N.I.C.E. guidelines

Consent

Play team intervention

RCN - Restrictive physical interventions and the clinical holding of children and young people

Cystic Fibrosis Clinic

Cystic fibrosis is a common genetic condition.

If you carry the C.F. gene there is a 1 in 4 chance of any children born to you having the condition.

All babies are routinely screened by the midwives when a SCRIVER test is done.

This test is not 100% accurate. C.F. may be suspected if a child presents to clinic with the following symptoms ; failure to thrive, recurrent chest infections, pale stools and salty

tasting sweat (clubbed fingers if diagnosed later). A sweat test and bloods will be arranged in clinic as part of the consultation.

Bloods can also be obtained for genetic testing.

The C.F. clinic is led by Dr Sugumar. The outreach nurse with a specialist interest in C.F. come down to Childrens clinic to see the patients and provide a first contact for the families and coordinate their care in the community.

Some children who have CF may grow an organism called pseudomonas aeriginosa in their sputum. This is difficult to treat. It is therefore very important that the patients with CF don't mix with each other therefore on arrival to clinic the patient is directed to a room.

N.B. There is a research study called TORPEDO. This study involves any C.F. children who grow pseudomonas in their secretions. The children are either treated with I.V. antibiotics or oral antibiotics.At the end of the study it will be decided which route is most effective in treating pseudomonas.

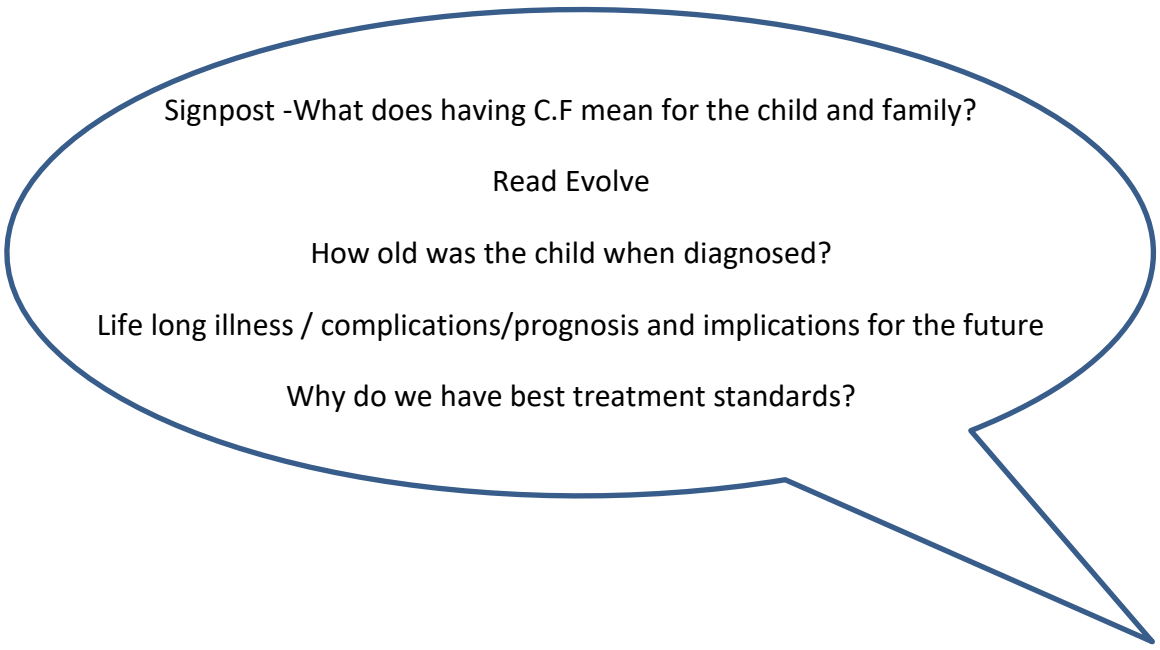
As part of the clinic the patient will have a spirometry done. This is a lung function test. The patient will also need a cough swab/aspirate, wt/ht and urine sample if over the age of 10.

Children with C.F. require annual screening .

Once a year children with CF are seen in clinic with Dr Sugumar and the multidisciplinary team from Manchester. This involves the consultant, dietician, physiotherapist and outreach nurses. This is as per N.I.C.E. recommendations which state that children with C.F. should be seen at least once a year with specialist staff from a tertiary centre.

The annual screening involves blood tests, a pancreatic ultrasound (5yrs) and chest x-ray. If the child is over the age of 10yrs they also need a glucose tolerance test.

A diagnosis of C.F. has long term implications for the child and extended family. An annual psychological assessment is done (WHO tool).



Psychological / social implications – the need for regular physio, taking medication and the importance of compliance.

Specialist nurse (based at M.C.H.), MDT,

Further Reading :

N.I.C.E. recommendations

Spirometry guidelines/cleaning policy

Read about any Research trials

https://www.cysticfibrosis.org.ok

https://www.nhs.england

Glucose tolerance test protocol

C.F. related diabetes

Paediatric Neurology

The neurology clinics are run by Dr Basu, Dr De Goede and Dr Kattakayam (epilepsy).

Dr De Goede also does a Duchenne Muscular Dystrophy clinic. This is multidisciplinary involving a specialist nurse, O.T. and physio. There should be clinical psychology

Dr Basu does a clinic a few times a year for children who are on the ketogenic diet. She also specialises in epilepsy.

A transition clinic occurs monthly . This is for adolescents who are leaving the children's services and are transferring to the adult team. This clinic gives them a chance to meet the adult consultant and specialist nurse.

Adult and Paediatric Epilepsy Specialist Nurses attend the clinics.

Neurosurgery

This clinic is done by Mr Kamaly. He is a neurosurgeon who works in Manchester. The children are operated on at Manchester Childrens Hospital but attend Preston as an out - patient .

Signpost

What is/was the presentation for the child?

See EVOLVE letter/referral

What investigations may be required?

Children who attend Mr McEvoy's clinic are referred for a variety of conditions. He sees new referrals and follow ups.

Sometimes the children may require a blood test or to be listed for surgery. If the child requires to be admitted for surgery the staff nurse will go through the pre admission paperwork provide the child/ family an opportunity to ask questions/express any concerns.

The play team are available to provide age appropriate pre-operative preparation.

Mr McEvoy also does a 'baby hip' clinic. This is to assess any babies who may have hip dysplasia.

Julie Sutcliffe is a paediatric physiotherapist who does a paediatric foot clinic on the same day.

Signpost

Read EVOLVE or read referral letter

Why has the child come to clinic?

What investigations may the child require?

What other referrals can be done to help the child's mobility/outcome ?

Are there any future implications for the child relating to the condition ?

Further Reading :

N.I.C.E. – orthopaedic problems in childhood

RCN website – Benchmarks for orthopaedic nursing care

S.T.E.P.S

Chaperone policy - LTHTR

Consent - LTHTR

Pre operative preparation

www.evidence.nhs.uk/search paediatric day case surgery

Hip dysplasia leaflet

Cleft lip/palate clinic

There is a Network – The Northwest Cleft Lip and Palate Service – combines Liverpool and Manchester Network.

Mr Van Eden and Miss Beale attend for the clinic monthly on separate days. It is a requirement under the NICE recommendations that children are operated on at a Tertiary centre. However, the children who need to be seen as an out - patient can be seen at a local centre, many patients travel to see the CLP Team.

This clinic is multidisciplinary so that the child has a full assessment and involves a large team of professionals .The team includes orthodontist, speech therapist, psychologist and dietician.

Signpost

What causes cleft /lip/ palate?

When was the condition diagnosed?

What intervention may be required as the child is growing up?

What psychological implications may a diagnosis of cleft lip/palate have on the child/family – present and future ?

What follow up will be required ?

Further Reading:

https://www.clapa.com

www.nhs.uk/conditions /cleft-lip-and-palate

https://pathway.nice.org.uk/pathways/surgical-management

https://www.england.nhs.uk

Immunisation Clinic

This clinic is managed by Dr Hall. In this clinic we administer immunisations to children who have a known allergy or have had a suspected allergic reaction to an immunisation/vaccine in the past. The patients are usually referred by the G.P. but sometimes a paediatrician.

On arrival to the clinic the children are weighed and a P.E.W.S assessment is carried out. The child is then seen by Dr Hall after which the immunisation/vaccine is administered by the nurses. When the immunisation / vaccine has been given , another P.E.W.S. assessment is done 15 minutes later and at 15 minute intervals thereafter and for the duration that Dr Hall has requested the child to stay. It is important to ensure all emergency drugs can be accessessed promptly and the anaphylaxis guidelines are followed. The emergency drugs must be prescribed before administering the immunisation /vaccine.

Signpost

Consent, patient information leaflet.

Immunisation schedule

CONWISE charts

Talk to families

Further Reading:

https://www.gov.uk – The Green Book

www.anaphylaxis.org.uk/knowledge

https://www.nice.org.uk//guidelines

https://www.resus.org.uk

Intramuscular injection policy – LTHTR

www.medicines for children.org.uk

Handwashing Policy - LTHTR

A.N.T.T. policy- LTHTR

See P.E.W.S charts

Synagis Clinic

This clinic is seasonal and runs between the months of September and January. It is managed by Dr Gupta and is usually an all-day clinic.

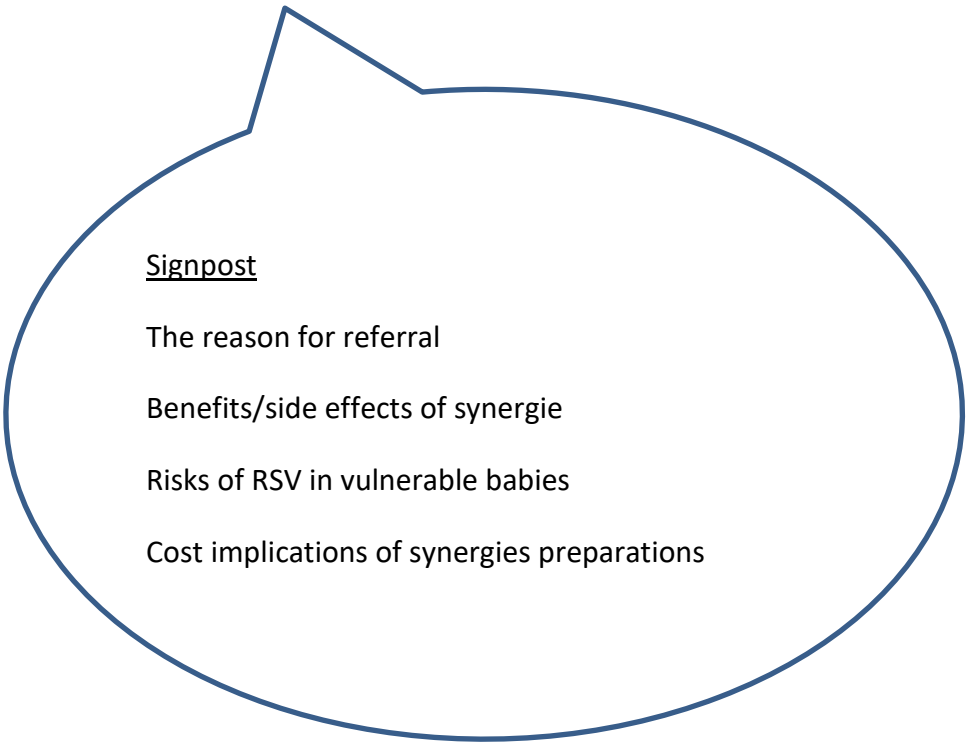
Palivizumab (Synagis) is a monoclonal antibody licenced for the prevention of serious lower respiratory tract disease. RSV is one of the commonest pathogens known to cause

bronchiolitis and can be fatal in vulnerable babies .The antibody is only affective for 1 month so the babies are required to attend monthly appointments.

The clinicians decide beforehand which babies are suitable for palivizumab and it is discussed with the parents of the importance of keeping the appointments. A written consent is required.

The palivizumab is constituted in pharmacy on the morning of the clinic and is prepared according to the baby's weight. It is arranged with the parents for the baby to be weighed the week before attending appointment. The outreach nurse or health visitor will usually facilitate this.

On the day of appointment the baby is weighed again. A PEWS assessment is carried out and the baby is then assessed by Dr Gupta before the palivizumab is administered. The palivizumab is administered via an intramuscular injection. Occasionally the drug is omitted if the baby is unwell. It is postponed only for a short time.



Further Reading

Neonatal guidelines – Guidelines for the use of Palivizumab (synagis) for Infants and children under 2years of age.Child Health Directorate - LTHTR

Intramuscular injection policy - LTHTR

PEWS assessment chart - LTHTR

A.N.T.T. policy - LTHTR

Handwashing policy –LTHTR

The Green Book.Chapter 27a Respiratory Syncytial Virus – 7 March 2011

Medicines For Children

Genetics

This clinic is run by Dr Banka and Professor Clayton – Smith who come from Manchester. A genetic nurse councillor also attends. Many of the children and their parents require bloods.

Signpost:

What symptoms does the child have?

See referral letter/EVOLVE

What tests may be required?

Further Reading:

www.nhs.uk/conditions/genetics

Endocrine Clinic

This clinic is run by Dr Kendall and is attended by the endocrine specialist nurse

(Sr Angela Waktare)

The children who come to this clinic will have been referred either by their G.P. or another consultant.

An endocrine disease is any disease that affects the endocrine system. Some examples are:

Congenital adrenal hyperplasia

Addisons disease

Cushings disease

Hypothyroidism

Hyperthyroidism

Graves Disease

Dwarfism

Gigantism

Any disease which affects the sex hormones.

Many of the children attending this clinic require bloods and some may be referred on for genetic testing and growth hormone injections. Some of the investigations are undertaken on the Day Case area of ward 8.

Further Reading

Report of the Children and Young People's Health Outcomes Forum (2012)

Allergy Clinic

Overview

Children's clinic offers a local comprehensive specialist service to diagnose, treat and manage allergies and incorporates a multi-disciplinary approach. A child's journey follows consultation, diagnosis, management, support and referral to community paediatric services. This is facilitated by the local clinician Dr Lumsden and is also nurse led by SR Teresa Jing Rowe. Visiting specialist nurses and a paediatric allergy/immunology consultant from Manchester Children's Hospital (Dr Hughes) also frequents the clinic.

Children can present in clinic with prevalent, atopic (inherited), suspected or unknown allergies. They may present with one allergy or multiple. Common allergies in children include allergies to milk, eggs, certain foods and also environmental / aero related (airborne) allergies. Aero allergies include dust mite and pollen. A full diagnostic history is obtained by the consultant. This is allergy focussed in terms of the child's presentation, which can be recent or historically present from weaning or birth.

Signs of allergies : allergic asthma ,eczema, anaphylaxis, angioedema (facial swelling of the eyes and lips),urticarial (hives),vomiting, abdominal pain and breathing difficulties.

Physiology in focus : Humans produce immunoglobulins E (IgE antibody) when they are exposed to an allergen (a foreign substance) .This can trigger an abnormal response in the body. IgE binds to mast cells (a type of white blood cell that is part of the immune system) and determines inflammatory response and allergic reaction in sensitive children.

Diagnostic Tests :

Diagnosis can involve

Blood tests

Skin prick testing

Open food challenges

The result of blood testing and skin prick testing may support a clinical diagnosis to determine hypersensitivity. Other controlled tests include open food challenges. This involves small to larger dosages of specific allergens being administered by the Day Case nursing team on Ward 8. Blood tests and skin prick testing is carried out in clinic by nursing staff trained in skin prick testing and anaphylaxis management.

Management:

Most allergies are mild to moderate rather than life threatening and can be managed through avoidance, medication (anti histamines/salbutamol inhalers) to relieve some of the symptoms. Dietary advice including de sensitisation through a progressive introduction such as a milk ladder is discussed with parents and carers. Management plans are supplied and discussed by trained staff with the families and appropriate referrals sent to outreach, health visitors and school nurses. There are a small number of children at risk of anaphylaxis and require training with adrenaline auto – injector. In this case an anaphylaxis management plan is established and discussed with the families.

Further Reading

www.northwestallergynetwork.uk

UK resuscitation Council anaphylaxis algorhythms - available on LTHTR intranet

Protocol for skin prick testing for children in the diagnosis of allergy – available on LTHTR intranet

Paediatric allergy testing clinical guidelines - available on LTHTR intranet

Journal of Asthma and Allergy (Dove Medical Press)

Treatment Room - Ward 8 alongside of PAU

Treatment Room Monday (08.00-16.00), Wednesday (08.00-16.00) and Friday (08.00-14.00)

Nurse led Service Development to improve the child and family pathway for non-urgent follow up treatment

Focus on improving the child and family experience.

Patient Public Involvement – reduce complaints re: long waiting times, lack of continuity of care.

Improve Patient Pathway – Patient focused, standardized care plans to facilitate Evidence Based Best Practice.

Networking / develop links with MDT. Staff training and development.

Collaborative working.