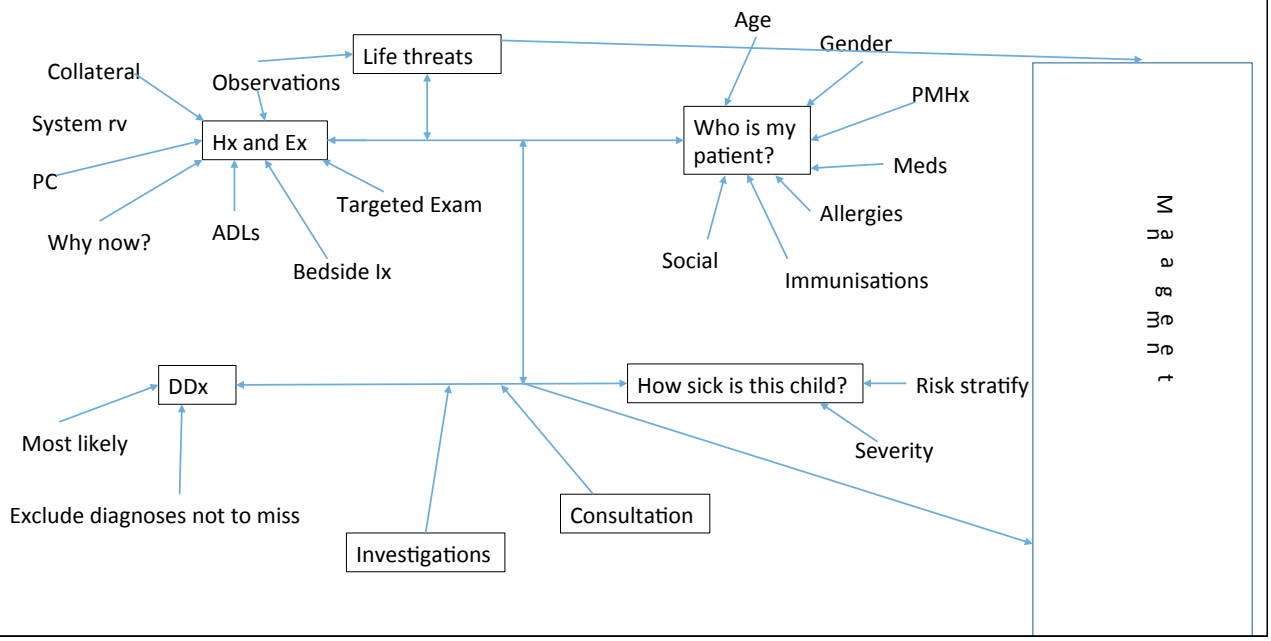
Clinical Assessment in Children

Dr Lisa Gotley
General Paediatrician
The Prince Charles Hospital

Children are NOT just little adults

- Developmental ages and stages
- Examination can be difficult
- Drug doses- often by weight
- Body proportions and physiology
  - Big head, small and floppy airway
  - Neutral head position for Airway management
  - Fixed stroke volume- increase HR to increase CO: hypotension a late sign of shock
- Environment- no child is an island!
- Our role as advocates
- Investigations can be difficult and even harmful

How Doctors Really Think!



Life threats

- Airway
- Breathing
- Circulation
- Disability
- Exposure
- Don't Ever Forget the Glucose!

MANAGEMENT OF LIFE THREATS comes before history/ examination

Who is my patient?

- Age- influences range of differentials, mode of assessment
- Family/ accommodation
- Who has presented the child?
- Past history
- Allergies, immunisations, medications, immunisations

- Social context is critical
- Influences presentation and discharge planning
- Past history assists with differentials

Patient becomes a person I can care about and contextualise

Subtleties of paediatric history

- Why presenting now?
- What are the parents most worried about?
- Think about daily activities for age and stage:
  - Feeding/ sleeping/ crying
  - Playing/ school/ activites
  - Intake/ output

ALWAYS TAKE PARENTS CONCERNS SERIOUSLY

History of presenting complaint

- **The Diagnosis should be clear in the next 10 sentences**
- Formulation of differential
- Contextualise questions to the problem
- Fever - nildocarf / what when where how
- **risk factor assessment**
- **severity assessment**
- **have a list of dangerous diagnoses to exclude**

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HPC

- Fever- Know what the key DANGEROUS DIAGNOSES TO EXCLUDE
- **Have 5 BAD conditions for every system that you are going to exclude**
- Do risk factor assessment for each condition
- This assesses the positive or negative likelihood of the particular differentials

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Examination- General Approach

- Spend time observing play / interaction with caregiver
- Be opportunistic
- Friendly – engage child
- Confident but gentle
- Remember stage of development
- Consider child's position

Examination- General Approach

- Start in a non-threatening area
- Explain in age-appropriate way
- Short mock examination
- Attend to privacy – particularly older child, adolescent
- Don't ask for permission!!
- Unpleasant tasks last

Examination – ABCDEFGH

- **General appearance** & **Vital signs**
- **A** - mouth, stridor
- **B** - RR sats distress AE ?added or decreased sounds
- **C** - HR BP CRT HS Pulses - preload/ afterload/ pump/ rhythm
- **D –** BEHAVIOUR! /GCS/ AVPU/ Pupils/ Posturing/ Meningism/ RICP

  pyramidal tracts /CN's/ cerebellar / sp cord/ basal ganglia / mini-mental /psych screen
- **E** - temp / skin / rashes/ exposure / endocrine / electrolytes

Examination

- F - fluids/ hydration status
- G - glucose / GIT / GUT
- H - hematological - liver spleen nodes platelets
- I - infection?
- J - joints / msk
- L - lines - IV, ETT, NGT, IDC, CVP, ARTL, ICC

Bedside Tests

- **Weight / HC / Length - percentile chart**
- **BSL**
- **Urine - mcs bhcg**
- **Spirometry / PF**
- FAST
- ECG

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Diagnostic Formulation

- Presumptive Diagnosis
- Differential Diagnosis
- Exclude DANGEROUS DIAGNOSES
- Problem list - active / passive
- Aetiological approach
- Organ / systems approach
- Risk stratification assessment / Severity

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Risk stratification/ severity

- CEWT
- ABCDE
- Age
- Immunisation
- Antibiotics/ immunocompromise/ chronic medical

- Gut instinct! Experience….

Other investigations

- Narrow differential diagnosis
- Rule out life threats/ severe
- Risk stratification/ severity
- Target therapy
- Direct disposition

Management

- **Resuscitative Measures**
- **Specific Mx titrated to END POINTS**
- Know intimately which treatments are rubbish!
- Goal Directed Therapy in Time Critical Manner
- **Supportive Mx**
- **Complications / Correct Diagnosis?**
- **Consultation**
- **Disposition -** Talented Streamlined Sensitive Sensible

Expert Disposition Planning

- Expert Communication
- Printed information with discussion
- **When to come back** – danger signs
- **Planned ED review** with an expert
- The 'follow up ED clinic'
- Referral to an expert GP
- Provide Physician names and contact numbers – 'OPEN DOOR POLICY'

Take home messages

- Attend to life threats
- Know your patient
- Why now?
- ADLs
- Target your examination
- Exclude dangerous diagnoses
- Risk severity- How sick is my patient?
- Assessment and management in parallel