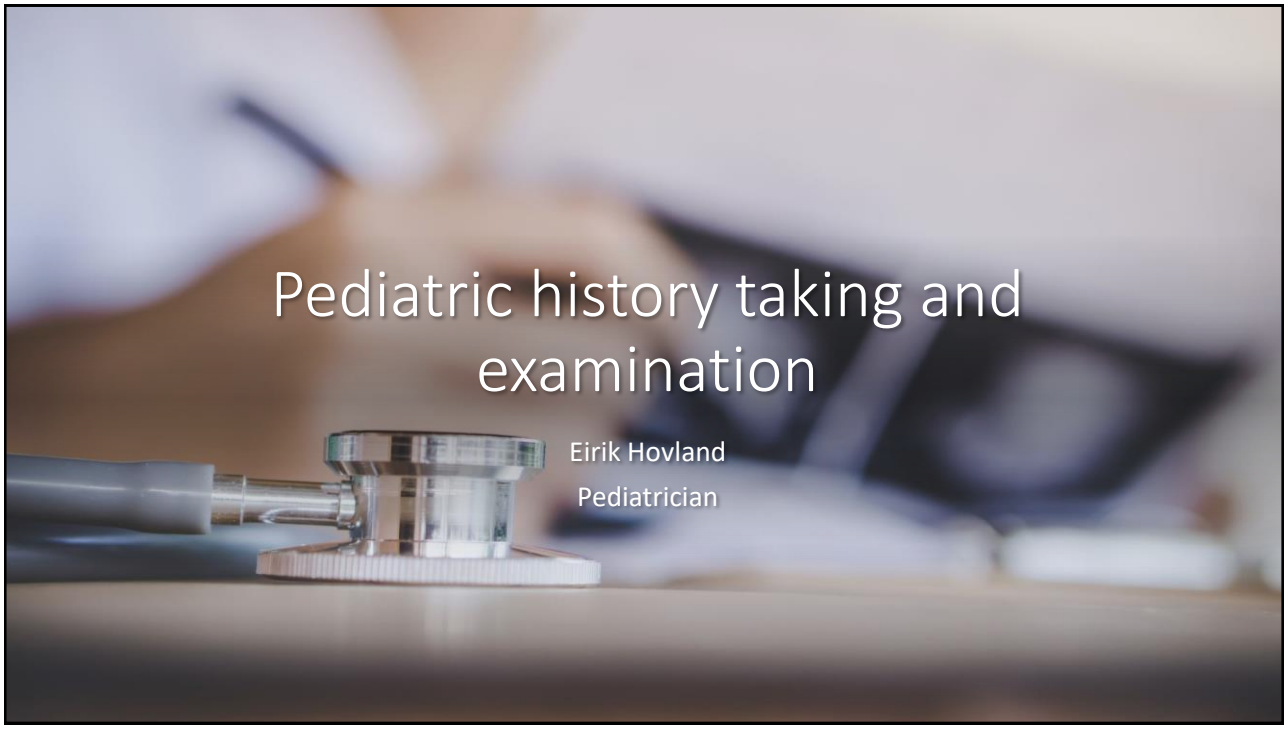

Pediatric history taking and examination

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Outline

- Tips to achieve a good consultation with a child/adolescent and its family
  - Age-related tips
- Important patient history points
- How to do a pediatric examination
- Important points that are specific to pediatrics

- **Not**: A step-by-step walkthrough of our patient record template → study yourselves, simply a recipe
- **Not**: A complete guide to history and examination

Goals

- Aquire information necessary to diagnose
- Attain the parents' respect and trust
- Give the child as good an experience as possible
  - Important for following contacts with health care services
  - Very important in itself!
- And these three points influence each other!

How to achieve a good consultation?

- You need to use your whole register as a human being – **empathy** not only gives the patient a better experience, but is also **necessary to get** the medical part of **your job done**
- You need to be **gentle**, **understanding, predictable** and **respectful**
  - Being strict, harsh and unpredictable will almost unanonimously destroy your opportunities to get anything done, and do substantial harm
    - To the child's trust to healthcare personnel in the future
    - To the rest of this stay at the hospital
    - To the parents' cooperation and feeling of being taken care of
- Always treat the child as a **sole human being** and recognize its presence
- Have toys available (for children of relevant age)
- You can **never be in a rush**
  - Or you need to pretend that you are not. Rushing things will often stall the child
- If you want to use humour and jokes, sense the situation carefully, **do not mock the child** – try instead to connect to the child
- **Different age groups** mandates completely different strategies
  - Adapt language to level of understanding
  - Different approaches to consultation (see later)
- And this needs to be combined with medical needs and demand for efficiency
- All of this requires **practice** and continuous reflection around own behaviour and communication

Tips for infants → 8-10 months

- Most often not very sceptical to strangers
- Poor understanding of verbal language, **very good understanding of non-verbal language and moods**
- Use the opportunity to connect to the child, which will provide important information (as well as a good experience for you!)
- Parents (especially mothers) of newborn infants may be especially emotionally affected, and require a high level of empathy and understanding

Tips for toddlers and preschool children

10 months – 4-5 years

- Most children of this age **evaluate strangers through their parents' attitude to them**, and require **«warm-up-time»**
- Do not approach the child first unless obviously invited
- In most cases, **greet the parents first** (but do send a kind smile to the child)
- Work to establish a **good relationship to the parents** through the history taking (keep sending little smiles to the child)
- Maintain distance, do not chase the child's attention, but be open to invitations
- Often, after some time, the child will have «warmed up» to you through the relation between you and the parent
- **Do not ask for permission** to examine, as you will do it anyway, but explain **calmly and friendly** what you are going to do
- Approach the child step-by-step, starting with the least invasive things
- If you are **invited to play**, this is a golden opportunity to bond!
- Save the silly jokes
  (children of this age generally do not understand irony. They do, however, understand if you are mocking them)

Tips for teenage patients

- **Greet the patient first.**
- Teenagers should, with increasing age, be increasingly respected as sole human beings and not just children of their parents
- Children 12-16 years should be offered (and you should actively suggest it) a **chat without the parents present**. Just say that it is routine (which it should be)
- The parents should also be heard out!
- My way:
  1. Meet/greet, smalltalk, friendlyness, explain how you plan the consultation
  2. Tell the parents that they will now be asked to be silent for 5-10 minutes («muzzle»), but that they will be allowed to say everything they want later
  3. Do a full history-taking with the child as if the parent was not present
  4. Let the parent fill in the gaps / say all that it wants.
  5. Ask the parent to leave the room
  6. Ask the child if there is anything it would like to add in private
  7. Ask the child questions that may be easier to answer in private (i.e. drugs, alcohol, sex – and whether it has experienced abuse/violence)
  8. Invite the parent back. Sum up.

Tips for children (4-)5-12 years old

- Often mandates an approach between the toddler and teenager one
- Requires you to **sense the situation** – some children are very shy, others are extremely outgoing
- Generally, **greet the patient first**
- The method with parent «muzzle» is often successful in this age group as well, but depends on the child (talkativeness)
- Here, it is most often not recommended to ask the parents to leave the room

Patient history in pediatrics

Usually first: Present situation / «aktuelt»

- The most important part! Prioritize time to explore this

- **Primary focus**: **Parents' concern** (or for older children/adolescent, the patient's)
- **Secondary focus**: Your thoughts about diagnoses etc.
  - In more obvious emergencies, the balance between these points may change

1. Start by **listening without questions**
2. Explore through **open questions**
3. Finally, **closed questions** are needed

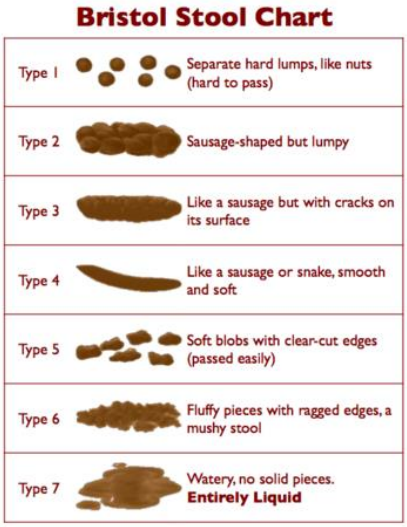
Vegetative functions

- Appetite
  - Pattern of feeding
    - Infants: breastfeeding, formula, solid foods
  - Known or impression of weight loss or gain?

- Urination
  - Frequency
  - Wetness of diapers

- Defecation
  - Frequency
  - Appearance
  - Pain/discomfort

- Sleeping cycle, alertness and activity



Routine history points in pediatrics

- Family structure/occupations:
  - Whole family? Married, live in common law, divorced, only a mother/father
  - Siblings, which number in the order
- Day care
  - Kindergarten, school.
- Are there any diseases in the family?
  - Consanguinity

- Pregnancy, birth, neonatal period
  - Maternal illness or problems during pregnancy
  - Mode and difficulties during delivery
  - Gestational age
  - Birthweight, length, head circumference
  - Birth complications? F.ex. Jaundice, infection. Admitted NICU?
  - Feeding history if appropriate

- Development
  - Apropriate for age?
  - Major milestones
  - Compared to siblings, friends (and parents)
- Growth
  - Infants: proper weight gain?
  - Head circumference
  - Older children: length/weight assessment
  - Immunization
    - Followed the Norwegian vaccination program? If not, why?
- Life (older children)
  - Hobbies, interests
  - More detailed on school – social well-being, subjects/performances, relation to teachers
  - Social life
  - Experienced problems in life – at home, at school

Other

- Allergies
  - To medication and foods

- Medication
  - Compared to internal medicine: Parents almost always have the full, actual information

Pediatric examination

General examination points

- Major difference from adults:
  - Pragmatism, prioritization
- All body parts should be examined uncovered during the examination, but clothes do not need to be removed at the same time
- Least intruding examination first
- Most intruding examination last

1. The first minutes (during history taking!)

- Gives you a large portion of the information you need
- Use your eyes and ears
- AND connect to parents and children

- What can you tell us about the current clinical condition of these children? →

Information obtainable during the first minutes

- **Respiratory system**
  - **Respiratory effort**
    - Respiratory rate
    - Deep/shallow
    - Retractions
    - Accessory muscle use
    - General impression of respiration (important!)
    - Skin colour (paleness)
    - Stridor, grunting, gasping
  - Respiratory efficacy
    - Cyanosis
    - Level of consciousness
- **Circulatory system**
  - **Skin colour**
  - Level of consciousness
- **Neurology**
  - Irritability
  - **Level of consciousness** / contact level
  - Confusion
  - Dys-/aphasia, dysarthria
  - Movement patterns (paresis, asymmetry)
  - Muscle tone
- **Other**
  - **General condition**
  - Obvious symptoms
    - Nausea and vomiting
    - Pain
    - Photophobia
    - Etc.

2. General description and vitals

- *Should always be included (see template):*
  - *All vitals* *(except BP in many cases)*
  - *Weight and height/length* *w/percentiles*
  - *Head circumference* (< 2 years)

- Information mentioned under «the first minutes»
- Palpate extremities (temperatur, dry/clammy)
- Peripheral pulses (brachial > radial in infants)
- Capillary refill time (**always** in the ER!)
- Rashes (especially important in pediatrics)
- Eyes: Sunken? Moist? Injected? Pus?

- Some of this information is obtained at other points in the examination

2. General description and vitals

How to describe general condition

- Good/normal – lightly reduced – moderately reduced – seriously reduced

- *«Alert, curious, talkative. Actively and eagerly explores the exam room while chewing on a banana. Cooperates actively to the examination, but protests firmly to unpleasant procedures.* ***Good general condition****.»*

- *«Appears sleepy, eyes closed during history taking. Sits on father's lap, torso hanging flaccidly over father's arm. Does not react to examination, not even to blood sampling.* ***Seriously reduced general condtion****.»*

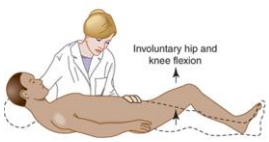
3. Auscultation of heart, lungs and stomach

- Why first? The child usually starts to cry during the examination
- Warm the stethoscope
  - Or auscultate through clothes (→ pragmatism!)
- Use the bell for heart auscultation (and membrane for the lungs)
  - Children breathe fast – bell filters some of those high frequency breath sounds

4. Head to toe except ENT exam

- Caput (head)
  - Shape (some syndroms, flat heads)
  - Anterior fontanel
  - Separation of sutures
  - Dilated veins (hydrocephalus)
- Collum (neck)
  - Lymph nodes
  - Neck stiffness (flexion – chin on chest!)
  - (Kernig/Brudzinski)

A Kernig sign



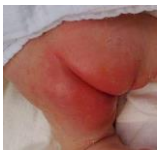
B Brudzinski sign

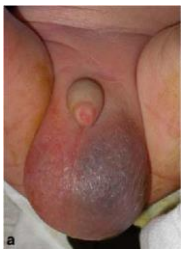
4. Head to toe except ENT exam

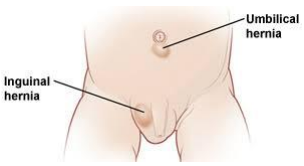
- **Thorax** (chest)
  - Anatomical variation
  - Surgical scars
  - (Axillary lymph nodes)
- **Abdomen**
  - In younger children, often better performed on the parents' lap
  - Eyes on patient's face
  - Distraction
  - (Groin lymph nodes)

4. Head to toe except ENT exam

- **Genitalia**
  - In small children, I generally always examine genitalia
    - Diaper rashes
    - Hernias
    - Scrotum – abdominal pain
    - Undescended testicles
- **Rectal exam**
  - Usually **not** performed.
    In some cases, it may provide info on possible constipation







6. ENT exam (the most intrusive part for small children)

Otoscopy

Oral cavity / throat exam

***Claim**: Possible in 95% of cases*

These exams are important in all fever cases (especially fever of «unknown» origin)

Questions or comments?