Approach to a Paediatric Patient

ABSTRACT: The approach to the issues that arise in the paediatric practice must include respect for both parents, responsibility for the life and health of a child and a child's developing capacity and autonomy. Further complexity is added by the varying social, cultural and religious views of the role of family, parental authority, appropriate methods for disciplining a child and alternative approaches to health care.

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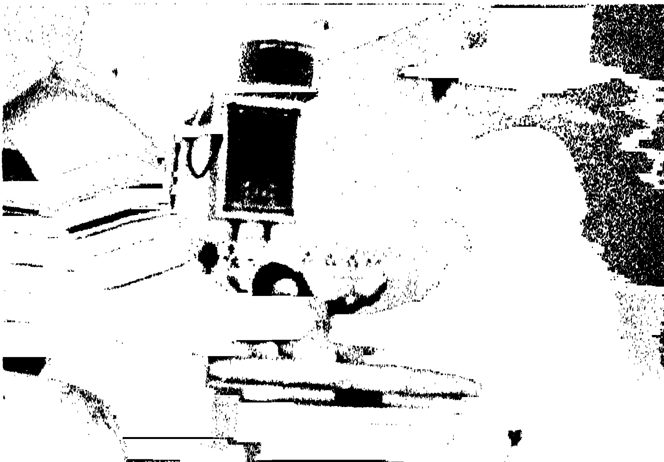

More than a century ago, paediatrics emerged as a medical specialty in response to increasing awareness that the health problems of children differ form those of adults and that a child's response to illness and stress varies with age. The emphasis and scope of pediatrics continue to change, but these basic observations remain valid. I believe that paediatrics is concerned with the health of neonates, infants, children and adolescents; their growth and development and their opportunity to achieve full potential as adults.

Clinical examination in paediatrics relies on the classic principles of history taking and physical examination applied appropriately in the circumstance of childhood and supplemented by such investigations as are necessary. Besides supplying information about the status of physical findings, a comprehensive and skillful physical examination considerably reassures the patient and family. Parents are favorably impressed by the physician who does a complete physical appraisal and are dissatisfied with the physician whose examination is hurried and incomplete. The physician who is confident, enjoys children and is patient, will find the physical examination productive and pleasant. The clinician who is hurried, annoyed, disinterested and impersonal may find these experiences frustrating.

To help assure a positive experience for every one involved, the physician should maintain a friendly, warm, seemingly unhurried and informal attitude throughout the assessment. Before beginning the direct examination, the physician should spend a few moments talking to the parents or become acquainted with the child perhaps by admiring her bracelet or shoes or giving the child a ball or other small toy to play with. This approach often proves time saving in the long run. He must address children by their name.

The physical examination should be conditioned by the patient's age, ie the physician should specifically look for physical findings that characterize the particular child's age group. The order of the examination also varies according to the patient's age. With older children, the physician

may begin with the head, and then proceed to the chest and so on. In infants and younger children, however the order of the examination is adapted to the individual situation. An infant's routine developmental assessment should be woven into the general examination. Questions about developmental achievements may be most naturally asked at this time. Since children tend to tire readily and are less than cooperative, the physical examination should be expeditious. In making requests during the examination, it is sometimes best to use positive statements such as, 'open your mouth Johnny,' rather than "will you open your mouth for me? The latter may be an open invitation to negativism. I have observed that infants are not apprehensive until seven or eight months of age. After this age, occasionally infants may show apprehension, poor cooperation and even terror.

The history has often to be obtained from parents or attendants. So the examiner has to be alert to the possibility that they may introduce secondary bias and make preconceived judgements based on limited knowledge or folklore.

History Of Present Illness

Specific points necessary are

1. Age and Sex: Note Date of Birth.
2. Symptoms of abnormalities and their duration.
3. The precise order of symptoms including any repeated episodes (eg asthma, epilepsy)
4. Feeding and appetite: Whether temporarily or permanently impaired.
5. Difficulty in swallowing is commonly functional rather than organic and related to attempts to persuade the child to eat against his will with resultant choking and gagging. The child with organic dysphagia may swallow food but will regurgitate it shortly thereafter.
6. Thirst if present: Assess the total daily intake of fluid and output of urine.
7. Vomiting: Amount, frequency, duration, effortless or projectile nature of vomitus (eg stained with bile of blood). An isolated symptom associated with abdominal pain (eg constipation), pyrexia, impairment of consciousness; in babies the possibility of rumination necessitates questions regarding observed movement of mouth and glottis prior to vomiting.
8. Abdominal distension if any.
9. State of bowels and character of stools: Normally infants pass several semisolid mustard-colored stools per day. Ascertain the frequency of bowel movement, character of the stools (hard or soft watery accompanied by mucus, blood streaked or mixed with blood; dark or pale floating on water, malodorous), presence of involuntary fecal soiling (encopresis), pain or crying (eg fissure)
10. Loss or gain in weight.
11. Discharge from eyes, ear, nose
12. Sore throat/cough: Ascertain duration and character. Dry or moist; paroxysmal; more severe in day or night; is it disturbing his/her sleep? Associated with pain, whooping, vomiting, chest pain, wheezing, nasal discharge or sputum.
13. Breathlessness: Present only on activity (exercise tolerance) or at rest; persistent or intermittent; of gradual or sudden onset; exercise induced; nocturnal or diurnal; associated with cough, cyanosis or breath holding? Extent, nature, degree of severity, intermittent or continuous, duration should be noted if any.
14. Localized swellings: Site, size, color, consistency, duration, presence or absence of local pain, tenderness.
15. Rashes or other skin lesions: Site, color, number and size of lesions; vesicles, ulcers, papules, macules, petechiae and itch..
16. Jaundice: Time of onset, duration, any abnormality in the stools or urine, vomiting?
17. Cyanosis: Peripheral or central, persistent or intermittent, affected by environmental temperature?
18. Pallor: Intermittent or persistent? Many children are naturally pale but pallor, when ill, is more noticed and tends to cause anxiety in parents.
19. State of the musculature: Normal active movements or not? Does the mother feel the limbs to be stiff (hypertonicity or spasticity), or

'floppy', slipping through her hands on lifting (hypotonicity)?

20. **Changes in posture or in walk:** Of long duration or recent; holding the body in any unusual way (eg torticollis or scoliosis); abnormality in gait (examine wearing out in shoes); falling frequently?
21. **Coordination:** Dropping things, spilling from a cup, impairment of fine movement (eg writing or buttoning clothing).
22. **Involuntary movements:** Nature of the movement; the same movement repeated or different movements; any injury suffered as a result of the movements; any aggravation by emotional stress?
23. **States of reduced consciousness:** Degree; premonitory symptoms or aura; duration; subsequent awareness of events; injury sustained; response to stimuli?
24. **Convulsions and fits:** State of the child prior to the convulsion, any precipitating factor (eg pyrexia), any premonitory symptoms, type of movement observed (eg tonic or clonic); duration of various stages, state of consciousness, loss of posture, incontinence; rolling up of eyes, biting of tongue or other injury; sleep or headache afterwards?
25. **Speech:** Delay in onset or loss of speech, nature of speech (eg gruff, aphonic, slurred), change in character, difficulty in comprehension or expression?
26. **Frequency of micturition:** How frequent, any recent change in pattern
27. **Defects in vision:** Able to follow a moving object with eyes, difficulty in reading or in distant vision, colliding with objects, color blindness?
28. **Headache:** Site, manner of onset, severity, and accompanying symptoms (eg vomiting), aura (eg migraine)? Younger children seldom complain of headache.
29. **Hearing:** Parental or teacher appreciation of hearing loss; unresponsiveness or inattentiveness; any evidence of mental retardation, behavior disorder or circumstance suggesting organic or functional deafness?
30. **Urine:**
    - Dysuria: Pain, burning or cry related to micturition?
    - Bed wetting and incontinence: Always present or recently developed.
    - Polyuria, dysuria, frequency of micturition; do particular circumstances produce the symptoms and what is the parental reaction to them (eg punishment or ridicule); unhappiness or bullying at school?
    - Volume of urine: Evidence of actual volume passed (parents tend to overestimate the amount of urine passed per day).
    - Character of the urine: Color (eg amber, red, smoky, like tea or cola drink), abnormal odor?
31. **Manipulative ability:** Ability to handle objects, writing, use spoon, knife and fork, dress and undress himself, tie shoe laces.
32. **Behavior and mood:** (Best discussed in the absence of the child). Active or hyperactive; quiet or lethargic; loquacious or silent; given to 'cocktail party' chatter (common in hydrocephalus); disobedient; aggressive; negative; reluctant to go to school; refusing food; withdrawn; averse to social activities; resistance to bedding; reluctant to sleep; fearful of the dark; frequent awakening daring the night; subject to nightmares or night terrors, temper tantrums, nail biting and thumb sucking; carefree or anxious; whining, nagging, demanding attention; fastidious or careless; highly strung or placid; crying too readily; jealous; volatile or stolid; speech disturbed? Relationship with parents, siblings, schoolmates and teachers?
33. **Treatment** already given must be ascertained.

Selectivity Of Questioning Depends Upon The Case Presentation: Not all of the questions indicated above will be asked in every instance; some will be secondary questions depending on positive answers to primary questions. Better not to ask too many rather than too few questions: the more extensive the questioning the more likely are forgotten points of history uncovered.

Previous History: Mostly a history about past ill-

ness in a child has to be obtained from parents, guardians or others. Baby books, photographs, health visitor and infant clinic records may help.

Birth History: An account of the mother's pregnancy and birth, is a necessary part of history taking in the case of an infant or young child. Ascertain illnesses which the mother had before or during pregnancy, exposure to drugs or radiation, hydramnios, hypertension, edema, albuminoidal, threatened abortion or ante-partum hemorrhage, length of gestation, duration of labor (prolonged or precipitate), type of delivery (high forceps and breech carry particular risk). Note the infant's birth weight, state at delivery (eg Apgar score), and postnatal history regarding events such as convulsions, breathing difficulties, cyanosis, jaundice, vomiting, infection, special or intensive care given if any.

Previous illnesses: Diagnosis, dates of occurrence, duration and severity.

Contact with infectious disease: Include contact with animals.

Residence abroad: Country and any particular hazards it holds?

Prophylactic inoculations: Received and any reaction to them?

Family History: Parents' ages, present state of (health, past health and possible consanguinity); Previous stillbirths or miscarriages (mothers who have had difficulty in conceiving and have had abortions, stillbirths, infant deaths or abnormal children, are more likely to have children who suffer from congenital abnormalities and cerebral palsy); Past or present illnesses or deaths (with cause of death) of siblings; illnesses of other relatives or occupants of the house?
Hereditary traits require inquiry regarding a much wider circle of relatives.

Developmental History: This involves the time of achievement of milestones of motor, vision/fine motor, social/adaptive and hearing/language progress. Note any evidence of dissociated development (eg delay in reaching linguistic skills compared with motor milestones, would raise the question of hearing impairment or speech disorder; standing, holding on to furniture before sitting, cerebral diplegia; normal manipulative ability combined with retarded postural milestones, ataxic cerebral palsy). Approximately 15% of mentally retarded children reach normal motor milestones during infancy.

Social And Environmental History: With most disorders it is necessary to build up a picture of the child's social and cultural environment; to appreciate tears and stresses both at home (eg parental attitudes, separation and divorce, absence of a parent, illness or chronic disability in the family, jealousy at the arrival of a new baby, the possible death of a near relative) and at school (eg a change of school, difficulty in meeting educational standards, over rigid discipline or bullying); to judge intelligence and ability as they affect capacity to meet the demands of communal living and education; to ascertain the occupation of the father, the site and condition of the child's home. Inadequately explained injuries or neglected appearance may raise the possibility of child abuse

Physical Examination: The examination of infants and children is an art demanding qualities of understanding, sympathy, patience and at nines finesse and subtlety. The pediatric patient who enters the consulting room or is ill in bed, may be a bawling infant whom nothing will pacify, a toddler clinging to his mother and burying his tearful face in her lap at the slightest movement of the examiner towards him, a more robust young man of early school age who stoutly and persistently resists all attempts to remove his clothing, particularly his trousers, an uninhibited hyperactive child who moves rapidly round the room deploying his destructive interest against toys, instruments or the examiner's papers, or an apprehensive schoolgirl who just retains her self-control during questioning but recoils in terror at the production of a sphygmomanometer or ophthalmoscope.

Relationship Of Examiner To Child And Parents: The child should be placed where he wishes, be it on the parent's knee or on a chair by himself. Re-

moval of clothing or a visit to the examination couch may come later. The examiner must remain patient and confident. Impatience and irascibility will deprive him of information which might be available. His demeanor should be friendly, sociable, tolerant, good-natured and restrained as he listens, observes notes and judges. He should encourage the mother and child no matter how the latter behaves. Loud noise tends to alarm children, a soft persuasive voice is more likely to be effective than stentorian exhortation. Conversation should be attuned to the intellectual and social level of the child. Talk to him/her and explain what is being done. Disturbing or painful procedures should be kept to the end.

General Examination: Clinical examination of a child begins from the moment of first meeting. One should examine from head to toe. A glance will reveal the state of consciousness. Much may be learned from first impressions of the child's appearance, state of nutrition, reaction to the environment, relationship with parents, conversation, speech, cry, size relative to age, state of activity, posture, overt deformity, injury or hemorrhage. The facies may indicate pain or anxiety, the blankness of mental retardation, wasting or the spasmodic movement of his tic. Weight loss or dehydration may be revealed by hollow cheeks and sunken eyes, edema by periorbital swelling. Mouth breathing, jaundice or cyanosis may be present. Some disorders, eg mongolism, cretinism, gargoylism, de Lange syndrome and sometimes tetanus, may be diagnosed immediately by the characteristic facies which they exhibit. Rashes call for appreciation of color, size, distribution and nature. The skin may be dry and loose in dehydration with loss of elasticity on lifting up skin folds, loose but not inelastic in weight loss, ulcerated, infected, dry. Ichthyotic, angiomatous, abnormally pigmented, sweating abnormally.

The nails may be bitten and show abnormalities including deficient formation, ridging, abnormal curving, infection. Finger clubbing may be present. Disturbance of rate or pattern of breathing or dyspnoea may be visible. Abnormal sounds such as high pitched cry, cough wheeze, stridor or whoop may be heard. Abnormal smells such as acetone (usually in a child who is refusing food) or the mousy odor of phenylketonuria may be detected. Posture may be abnormal as in opisthotonus, kyphosis or torticollis.

A few moments may tell much of a child's psychological make-up and intelligence. Is he nervous, excitable, distractible, withdrawn, intelligent or stupid? What is his emotional relationship with his parents?

Physical Measurements: Weight, head circumference and length are a must.

Examination Of Individual Systems And Regions

Individual systems can be examined in a standard sequence but in practice this is seldom appropriate. It is better to begin with the system which is likely to reveal the most information and to leave to the last, disturbing procedures and systems likely to yield least information.

We may discuss another time about the normal and abnormal child. I feel that knowing normal is absolutely necessary to know the abnormal. There is a wide grey area between normal and abnormal which needs to be understood well.

The 'LITTLE' Things...

As you might know, the head of a company survived 9/11 because *his son started kindergarten.*

Another fellow was alive because it was *His turn to bring donuts.*