

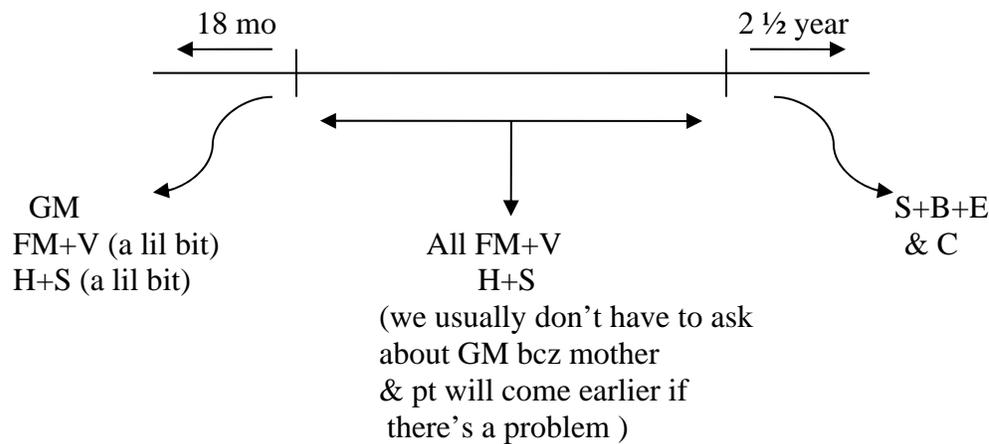
## DEVELOPMENTAL MILESTONES ASSESSMENT (short reference by team Lambda 1)

### 5 developmental fields

1. GM = Gross Motor ( ex: head control,sit,crawl,stand,walk,run,jump)
2. FM + V = Fine Motor & Vision ( ex; grab object ,draw)
3. H & S = Hearing and Speech
4. S+B+E = Social +Behaviour +Emotion
5. C = Cognitive function

- 3 parts of assessment: (a) questioning the caregiver/parents  
(b) observation  
(c) help of equipment

### PART 1: QUESTIONING



Conclusion : Developmental milestones is up to date . (for normal cases)

If abnormal: (possible conclusion)

- a) Delay (0-5 y.o )
  - i. Global developmental delay (all four developmental fields affected)
  - ii. Specific developmental delayed
- b) Learning difficulty (cognitive function)
- c) Disorder/difficulty = maldevelopment of certain skill
- d) Disability (restricted) = impairment /loss of physiological ability
- e) Handicapped

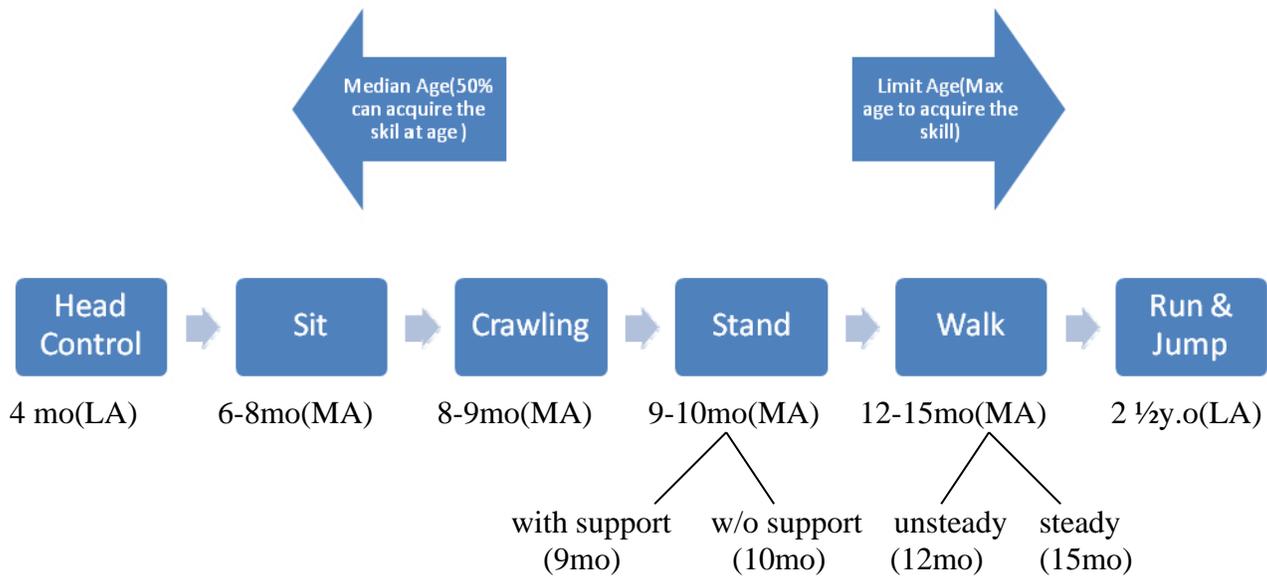
PART 2: Observation during physical examination/ stay in ward/ hospital

PART 3: Mainly for assessment of fine motor and vision development



# GROSS MOTOR DEVELOPMENT

1½ & 3 Months



## Pathology-

- Cerebral Palsy (most common),
- Spina Bifida/deformation,
- Congenital/Primary myopathy,
- Global Developmental Delay

Before concluding pathological causes consider possible physiology causes:-

### 1) Prematurity

Example =6 months old child showing characteristic of 3 months  
 During history taking, found out baby born prematurely at 28/52 POA

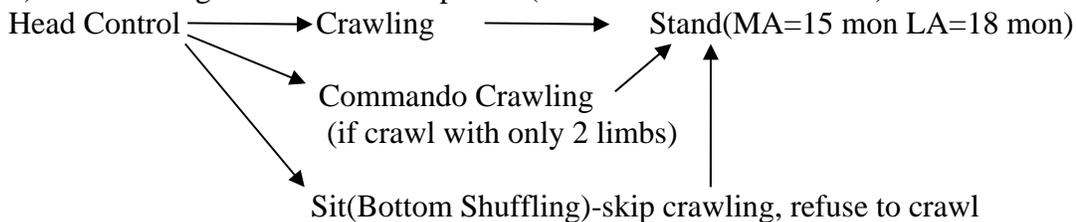
Calculation-> 28/52

$$40/52(\text{Full term}) - 28/52 = 12/52 = 3 \text{ month}$$

Chronological age (6 months) - 3 months = 3 months (corrected age)

So, corrected age of the child is actually 3 months. This means there is no delay in development.

### 2) Variation in gross motor development (LA = 27 month must walk)



**FINE MOTOR AND VISION**

Newborn-vision still not develop yet-baby keep looking at light wondering what is it

-6<sup>th</sup> week-can turn head 90°

-optokinetic nystagmus is norm

-3 month-can turn 180° look at the object

-6<sup>th</sup> month-palmar grasp

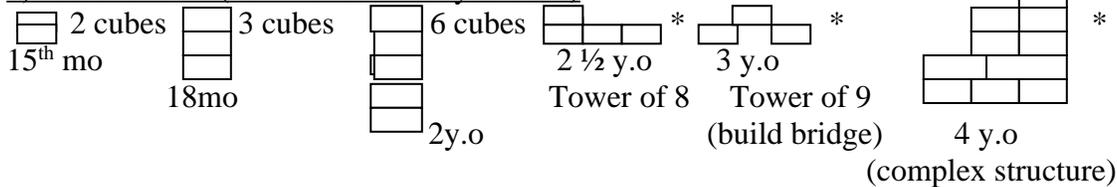
-7<sup>th</sup> month-transfer object to another

-10<sup>th</sup> month-use thumb and index fingers

-15-18 month-hold pen and scribble on paper

**TEST (with help of equipment)**

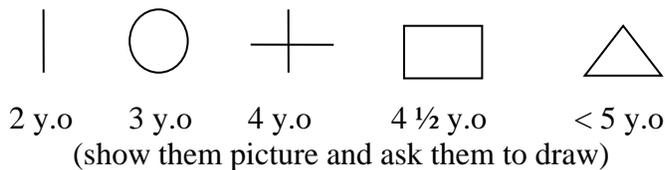
1) Tower of cube(15<sup>th</sup> month → 4 years old)



(\*) consider as complex structure

Child has to look at the example before make these complex structures, but physician should not demonstrate step-by-step how to do it

2) Pencil test(15<sup>th</sup> month → 18<sup>th</sup> month)



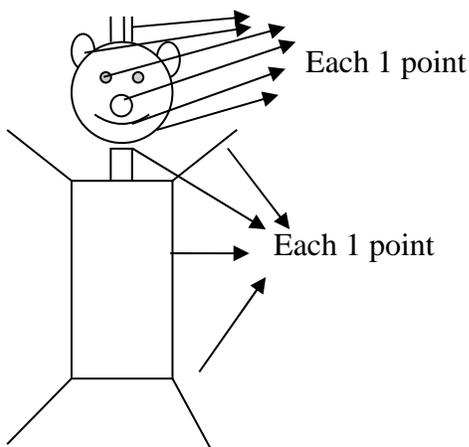
3) Goodenough Test/Draw-a-Man Test (only after 3 years old)

Why only after 3 years old? Because the child suppose to know how to draw a circle by that age.

13 points –each shape give 1 point

Points from extremities=10 points

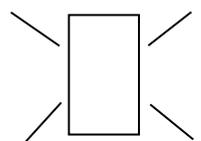
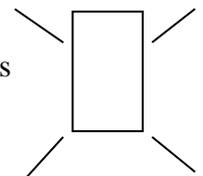
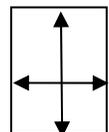
Formula: Mental age = 3 + (a/4), a= total points



Extra 1 point-trunk proportion (vertical>horizontal)

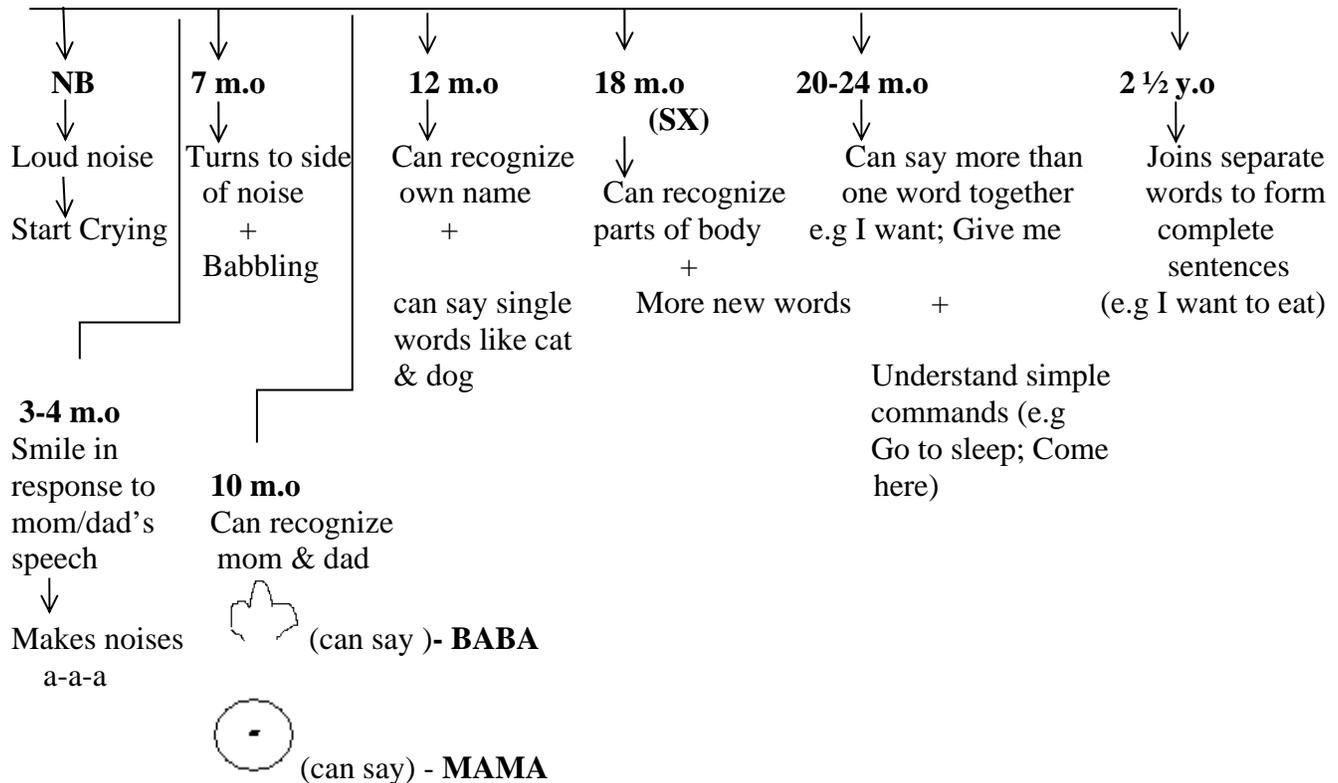
Extra 1 point for -limb is stick to the trunk, not like this extra 1 one point

Extra 1 point for correct position of the limb; no point for such =>



## HEARING AND SPEECH

### (TIMELINE)



**Hearing Problems** – i) Conduction;  
ii) Sensoryneural deafness

**Speech Problems** – divided to i) Receptive;  
ii) Expressive

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## SOCIAL ,BEHAVIOURAL AND EMOTION

**1 1/2 m.o** - Smile

**6-8 m.o** - Keep putting stuff into mouth using finger

**12 m.o** - Drink cup of water (with both hands)

**18 m.o** - Hold spoon → put into mouth

**18-24 m.o** - Play with toy

**2 y.o** - Know how to go to toilet (during daytime)

**3 y.o** - Play with others (interactive)

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## COGNITIVE (for school age child)

IQ test must be given to evaluate this ability of the child