Primary characteristics



•Sex

Stature

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Determination of age Three phases Foetus and new born Children and young adults upto 25 years of age Adults over the age of 25 yrs

In Foetus and new born

Viability

Important in cases of

infanticides

In Children and Young adults (less than 25 yrs)

- General Physical Examination
- Dental examination
- Radiological examination (ossification of bones)
- Miscll. Birth record, certificates, etc

General Physical Examination

General configuration and bodily development

	In male	In female
 Pubic hair 	13-15 yrs	13-14 yrs
 Axillary hair 	14-16 yrs	14-15 yrs
• Beard/moustache	15-17yrs	-
 Body hairs 	17-20yrs	-
 Development of breasts 		13 to 20yrs
 Greying of scalp hair 	40 yrs	40 yrs
• Greying of pubic hair	55 yrs	55 yrs

Height & Weight

Full term child:

50 cm length

(Doubles in 4 years)

Weight 2.5 – 3 Kg (Doubles in 5 months and trebles in 1 year)

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Dental Examination

Two sets

- Temporary/ Milk/ Deciduous teeth
- Permanent teeth

Successional teethSuperadded teeth

Difference between

Temporary teeth

- Smaller
- Lighter
- Anterior teeth vertical
- Neck more constricted
- Crown China white
- Ridge at junction of crown and fangs
- Cusps flat
- Roots smaller and more divergent
- Presence of tooth germ below on X ray

Permanent teeth

- Larger
- More strong, heavy
- Anterior teeth inclined forward
- Neck less constricted
- Crown Ivory white
- No such ridge at junction of crown and fangs
- Prominent Cusps
- Roots are larger and less divergent
- No such thing visible on X ray

Dental Formula



FDI SYSTEM OF DENTAL FORMULA

leeth

Teeth

Central Incisors Lateral Incisors

Canines

1 st Premolars

2 nd Premolars

First Molars

Second Molars

Third Molars

Temporary (Mth) L 6-8 U 7-9 L 10-12 U 7-9 17 - 18 Absent Absent

12 - 14

20 - 30

Absent

Permanent (Yrs) 6 - 8 7 - 9

11 - 12

9 - 11

10 - 12

6 - 7

12 - 14

17 - 21

Permanent teeth eruption:

Mother Is In Bed Baby Comes Monday Morning M I I B B C M M 6 7 8 9 10 11 12-14 17-21

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Period of mixed dentition

•6 to 11 years of age

Age from teeth beyond 25 yrs of age

Gustafson's Methods

- Attrition
- Periodontosis
- Secondary dentine deposition
- Cementum apposition
- Root resorption
- Root translucency

Scoring of different parameters

Attrition (A): Ao- No Attrition

 A1- Attrition limited to enamel level
 A2- Attrition limited to dentine level
 A3- Attrition up to pulp cavity.

 Peridontal disease (P):

Po- No obvious peridontal disease P1- Beginning of peridontal ds. but no bone loss P2- Peridontal disease more than 1/3rd of the root P3- Peridontal disease more than 2/3rd of the root.

• Secondary dentine (S):

So- No secondary dentine formation S1- Secondary dentine up to upper part of pulp cavity S2- Secondary dentin up to 2/3rd of the pulp cavity S3- Diffuse calcification of entire pulp cavity.

• Root translucency (T):

- To- No translucency
- T1- Beginning of translucency
- T2- Translucency more than $1/3^{rd}$ of the apical root
- T3- Translucency more than $2/3^{rd}$ of the apical root.

• Cementum apposition (C):

- Co- Normal cementum
- C1- Thickness of cementum more than normal
- C2- Abnormal thickness of cementum near the apex of the root
- C3- Generalized abnormal thickness of cementum throughout the apex of the root.

• Root resorption (R):

- Ro- No resorption
- R1- Spotted resorption
- R2- Resorption limited to cementum
- R₃- Extensive resorption of both cementum and dentin

Gustafson's formula

• Estimated age = 5.34 (total score) + 4.08

Other information from teeth

- Sex from teeth
- Race from teeth
- Occupation from teeth
- Social status
- Teeth used as weapon of offence
- •Bite marks on victim

Joints • Shoulder • Elbow • Wrist •Hip

Appearance of ossification centres
Fusion of epiphysis with diaphysis

Sternum

	Appearance	Fusion
 Manubrium 	5-6m(IU)	>50y

Body 1st Segment 5-6m (IU)
 2nd Segment 7m (IU) 14-25
 3rd Segment 7m (IU) years
 4th Segment 10m (IU)
 Xiphoid 3 yrs >40y