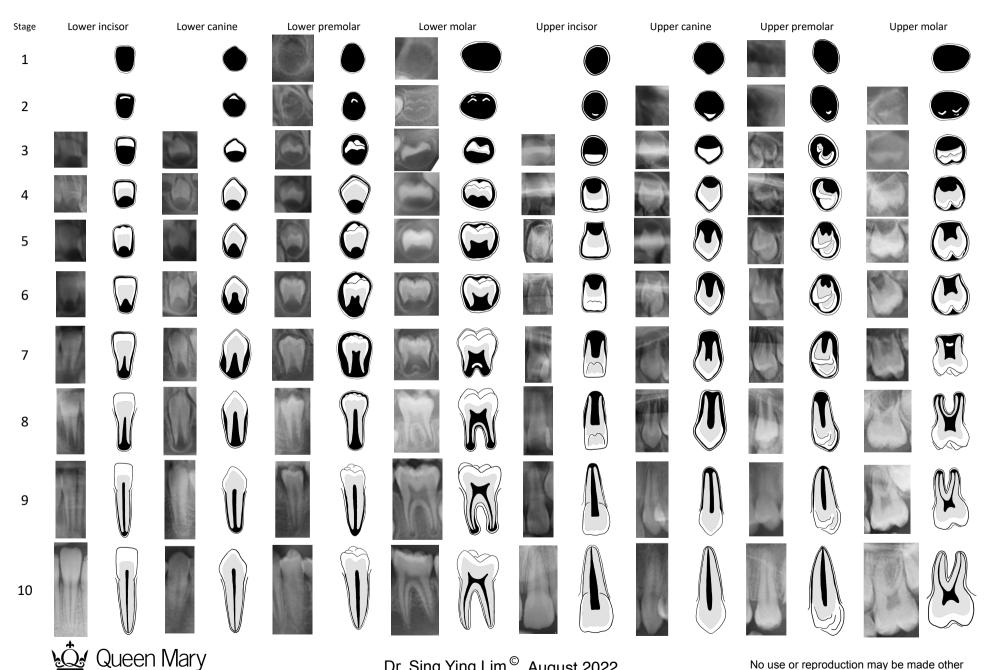
Drawings and radiographs for Nolla's stages



University of London Queen Mary University of London Barts and The London School of Medicine and Dentistry

http://www.smd.qmul.ac.uk/dental/

Dr. Sing Ying Lim[©] August 2022

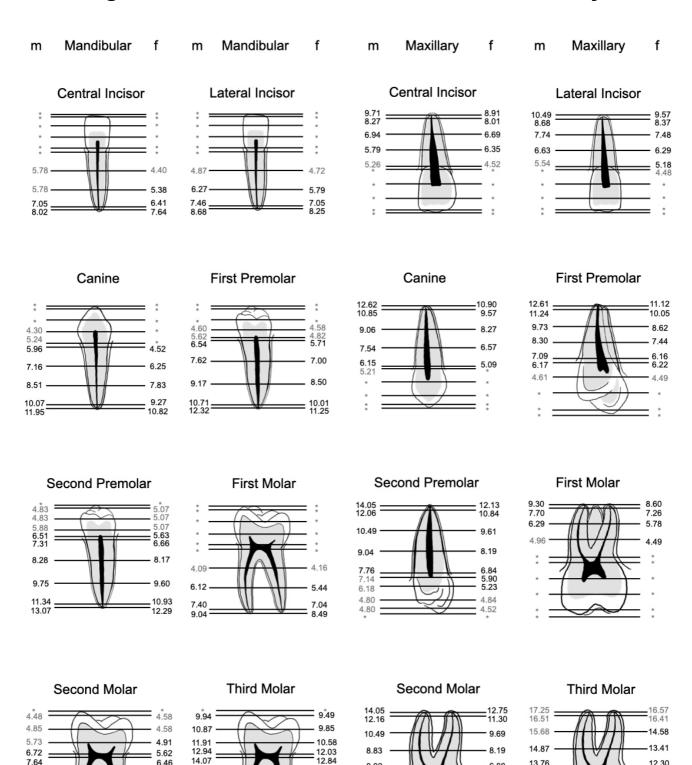
No use or reproduction may be made other than by written arrangement with the author. The author hereby asserts her moral rights.

Descriptions for Nolla's stages

| Stage | Abbrev. | Descriptions |
|-------|-------------------|--|
| 0 | | Absence of crypt |
| 1 | Crypt | Presence of crypt |
| 2 | Cri | Initial calcification of incisal / cusps tip |
| 3 | Cr _{1/3} | 1/3 crown complete Flat dentine base No pulp horn |
| 4 | Cr _{2/3} | 2/3 of crown complete Gentle curved dentine base with converging ends Enamel and dentine can be differentiated |
| 5 | Cra | Crown outline almost complete Curve of the dentine base is more pronounced approximally (umbrella shape) Enamel-dentine junction more pronounced |
| 6 | Crc | Crown outline complete with cervical constriction Well-defined enamel-dentine junction Defined pulp roof with root initiation |
| 7 | R _{1/3} | 1/3 root formation with root length less than crown height Root dentine from cementoenamel junction noted Molar : visible bifurcation area |
| 8 | R _{2/3} | 2/3 root complete, root length equal or greater than crown height Wide root canal with thin dentine walls Root ends diverge |
| 9 | Rc | Root length almost complete with parallel ends Open apex with radiolucency and wide periodontal ligament space |
| 10 | Ac | Apical end of root complete (closed apex) with uniform periodontal ligament space width |



Mean age of attainment for mandibular and maxillary teeth



8.02 7.14

6.61

6.46

6.28

14.60

15.46



6.46

7.88

9.37

15.57

7.64

8.82

10.44

12.24

14.10

Queen Mary University of London Barts and The London School of Medicine and Dentistry http://www.smd.qmul.ac.uk/dental/

Dr. Sing Ying Lim[©] August 2022

13.76

12.53

11.42

10.65

9.67

6.88

4.63

12.30

11.68

10.79

9.98

9.13

No use or reproduction may be made other than by written arrangement with the author. The author hereby asserts her moral rights.