

"External Appearance during the Second Month"

» End of Fourth Week

- Embryo has approximately 28 somites
 - Main external features: somites and pharyngeal arches
 - Embryo age expressed in somites

» Second Month Development

- Counting somites becomes difficult.
- Age indicated as crown-rump length (CRL), expressed in millimeters
- CRL is the measurement from the vertex of the skull to the midpoint between the apices of the buttocks

» External Changes

- Increase in head size
- Formation of limbs, face, ears, nose, and eyes.

» Fifth Week

- Forelimbs and hindlimbs appear as paddle-shaped buds.
- Forelimbs located dorsal to the pericardial swelling at the level of the fourth cervical to the first thoracic somites.
 - Innervated by the brachial plexus.
- Hindlimb buds appear slightly later, caudal to the attachment of the umbilical stalk at the level of the lumbar and upper sacral somites

» Growth of Limb Buds

- Terminal portions of the buds flatten.
- Circular constriction separates terminal portions from the proximal, more cylindrical segment.

» Digit Formation

- Four radial grooves separating five slightly thicker areas appear on the distal portion of the buds.
- These grooves foreshadow the formation of the digits