



Stage 16

(6 to 8 weeks post fertilization)

Head and Neck

Brain is well marked by its cerebral hemispheres. The hindbrain, which is responsible for heart regulation, breathing and muscle movements, begins to develop.

Future lower jaw, the first part of face to be established, is now visible while future upper jaw is present, but not demarcated.

Mesenchymal cells originating in the primitive streak, the neural crest and the prechordal plate, continue to form the skull and the face.

External retina pigment is visible and the lens pit has grown into a D shape.

Nasal pits are still two separate plates, but they rotate to face ventrally as head widens.

Thorax

Primary cardiac tube separates into aortic and pulmonary channels and the ventricular pouches deepen and enlarge, forming a common wall with their myocardial shells.

Mammary gland tissue begins to mature.

Abdomen and Pelvic Regions

The mesentery, which attaches the intestines to the rear abdominal wall, holds them in position and supplies them with blood, nerves and lymphatics, is now clearly defined.

Ureter, the tube that will convey urine from the kidney to the bladder, continues to lengthen.

Proliferation of the coelomic epithelium indicates the gonadal primordium.

Limbs

Hand region of upper limb bud differentiates further to form a central carpal part and a digital plate.

The thigh (rostromedial part), leg (the caudomedial part) and foot areas can be distinguished in the lower limb buds.