

The philtrum is the vertical groove between the nose and upper lip. In patients with Fetal Alcohol Syndrome, a common facial manifestation is an abnormally long, smooth philtrum in the center of the upper lip.

Short Palpebral Fissures

[Short-ruler Pulp Fissures](#)

Palpebral fissures are openings between the upper and lower eyelid; the elliptic space between the medial and lateral canthi of the two open eyelids. These can be characteristically shortened in FAS.

Cardiopulmonary Abnormalities

[Abnormal Heart and Lungs](#)

Heart defects associated with Fetal Alcohol Syndrome include ventricular septal defect, atrial septal defect, patent ductus arteriosus, and Tetralogy of Fallot. In severe cases, heart-lung fistulas may be seen. The primordial heart begins to beat during the fourth week of gestation and arises from mesoderm. Prenatal alcohol exposure can impact cardiogenesis by altering the retinoic acid pathway. Retinoic acid is critical to early cardiac development, aiding in the specification of cardiac progenitor cells.

Musculoskeletal Abnormalities

[Muscle-skeleton with Abnormalities](#)

Growth retardation is a characteristic of Fetal Alcohol Syndrome, associated with height, weight, and head circumference deficiencies. Clinically, this can present as a small body size, microcephaly, midface hypoplasia or micrognathia (a receding chin), and/or decreased muscle tone. Additionally, other orthopedic manifestations may be present, such as limb abnormalities or dislocations, joint contractures, scoliosis, hip dislocations, or pectus excavatum.

Genitourinary Abnormalities

[Abnormal Genital-gentleman-Urinal](#)

Prenatal alcohol exposure has been linked to urinary and kidney anomalies, such as aplastic / hypoplastic / dysplastic kidneys, urethropelvic junction obstruction, and functional abnormalities. These functional abnormalities can include impaired potassium excretion, impaired urinary concentrating ability, or impaired renal acidification, even in the absence of structural changes.