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Embryology of Iris

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The first sign of the eye formation is the single walled Primary optic vesicles which in humans starts at fourth weeks of gestation on either side of the forebrain. It moves outwards to finally meet the surface ectoderm [6].

The distal portion of the optic vesicles invaginates inward to form a double layered optic cup. The gap that forms in the wall during this process, will carry essential blood vessels (hyaloid vasculature) and is called choroidal fissure. Failure to complete this process will end up with colobomas in the infero-nasal quadrant of the eye.

At the same time the surface ectoderm gets thicker at the top to form lens placode, which invaginates inside to form the lens vesicle.

The neural crest component of the secondary mesenchyme goes between the cornea and the newly formed primitive lens to form the corneal stroma, corneal endothelium, anterior chamber angle and iris stroma [9].