Implantation

Anatomy Department

Beni-Suef University

Intended learning objectives (ILOs)

By the end of this lecture the student will be able to:

1. Define the term implantation.
2. Describe its mechanism.
3. Describe abnormal sites of implantation.
4. Recognize parts of decidua.
5. Trace the events that occur in the blastocyst to become chorionic vesicle.

Implantation

It is the process by which the blastocyst becomes embeded in the endometrium.

1.Site: in the upper part of posterior wall of the uterus.

2.time: it starts at the 7^{th} day and completed at yhe 11^{th} day.

3.Mechanism:

4.Changes of blastocyst during implantation

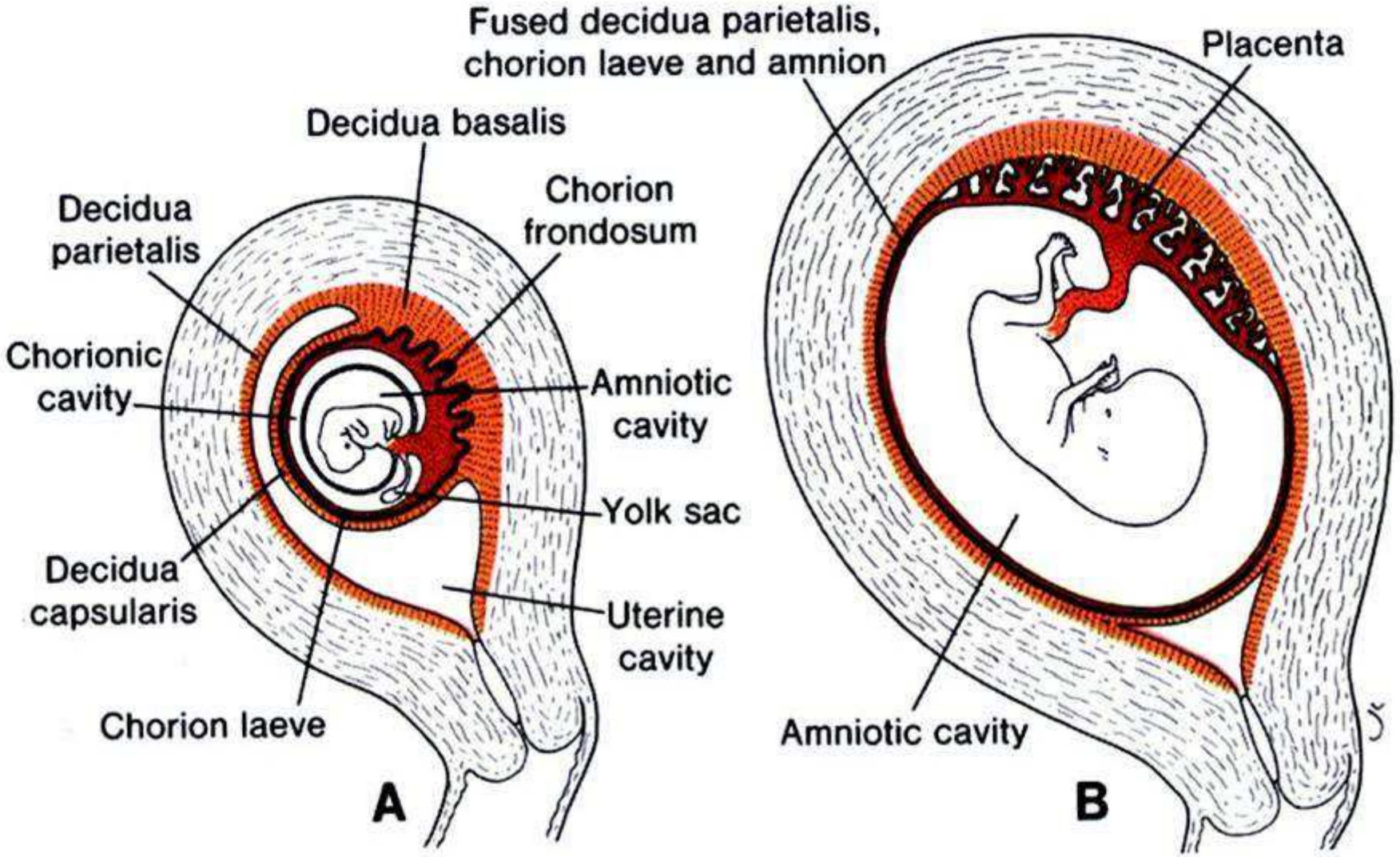
5.Abnormal sites of implantation:

-Placenta previa (parietalis, marginalis or centralis)

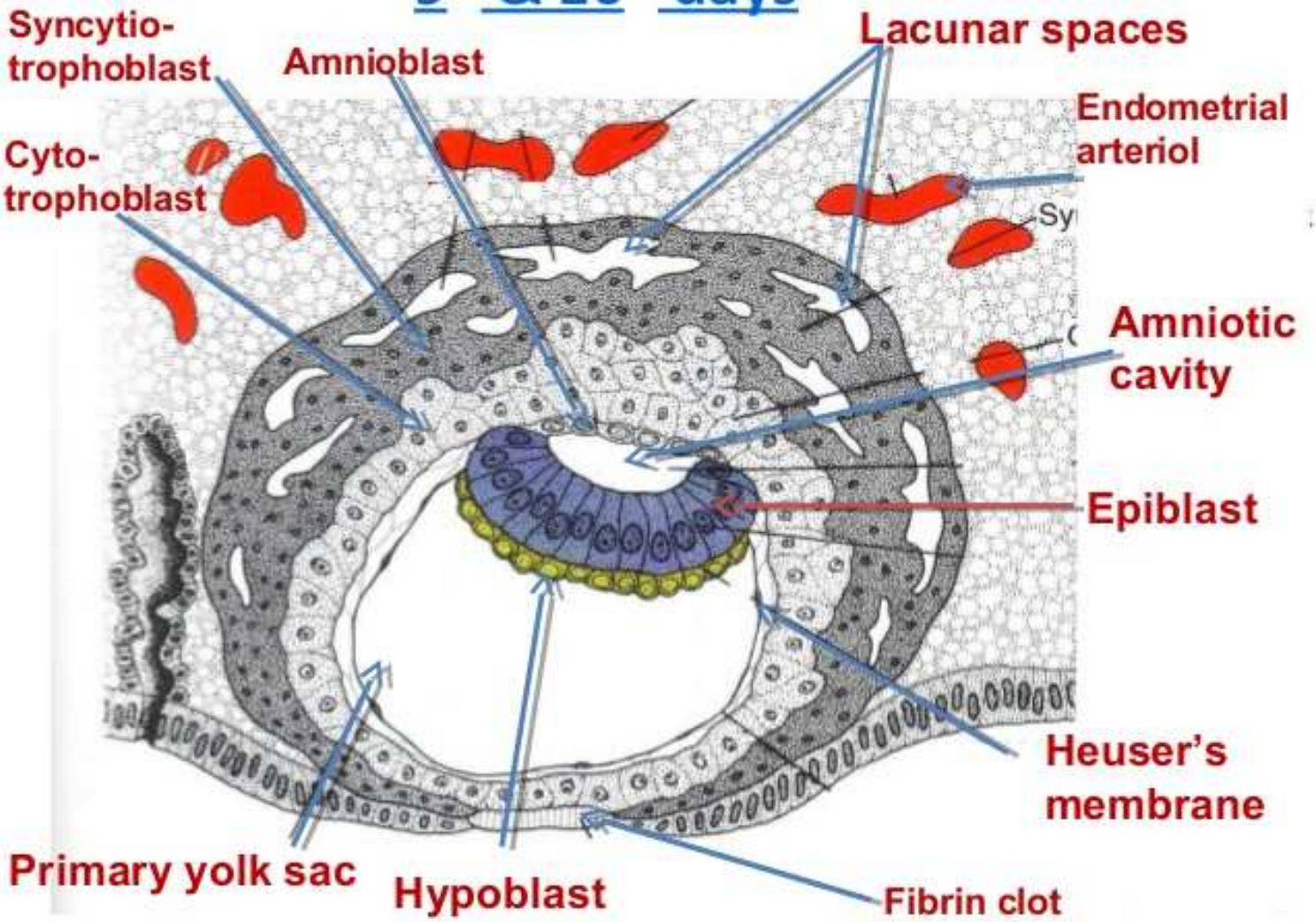
-Ectopic pregnancy (tubal, ovarian or omental)

Decidua

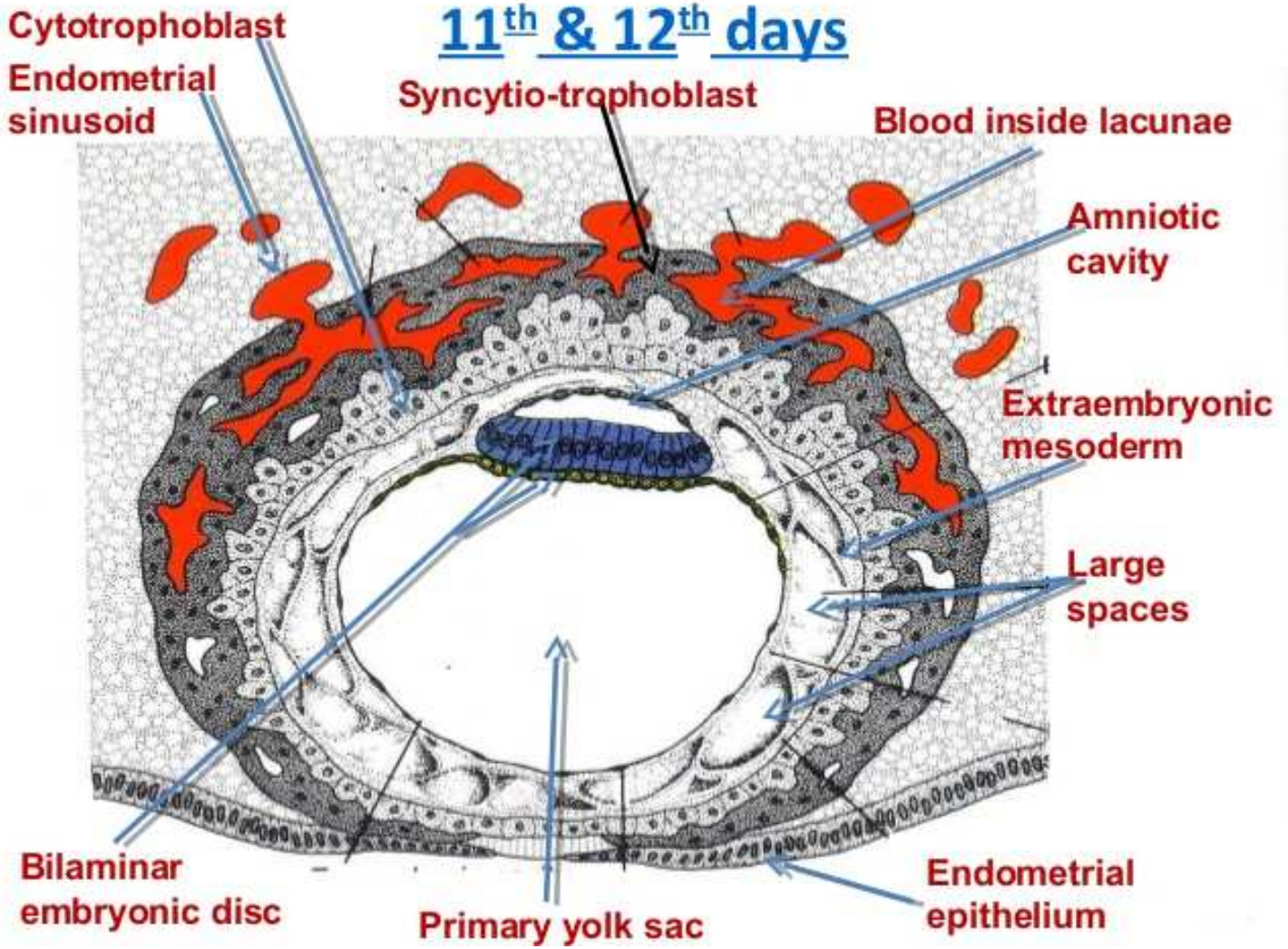
1. Features of decidua
2. Parts:
    - Decidua basalis
    - Decidua capsularis
    - Decidua parietalis
3. Fate of decidua


Fused decidua parietalis,
chorion laeve and amnion
Placenta
Decidua basalis
Chorion
frondosum
Decidua
parietalis
Chorionic
cavity
Amniotic
cavity
Yolk sac
Decidua
capsularis
Uterine
cavity
Chorion laeve
Amniotic cavity
A
B

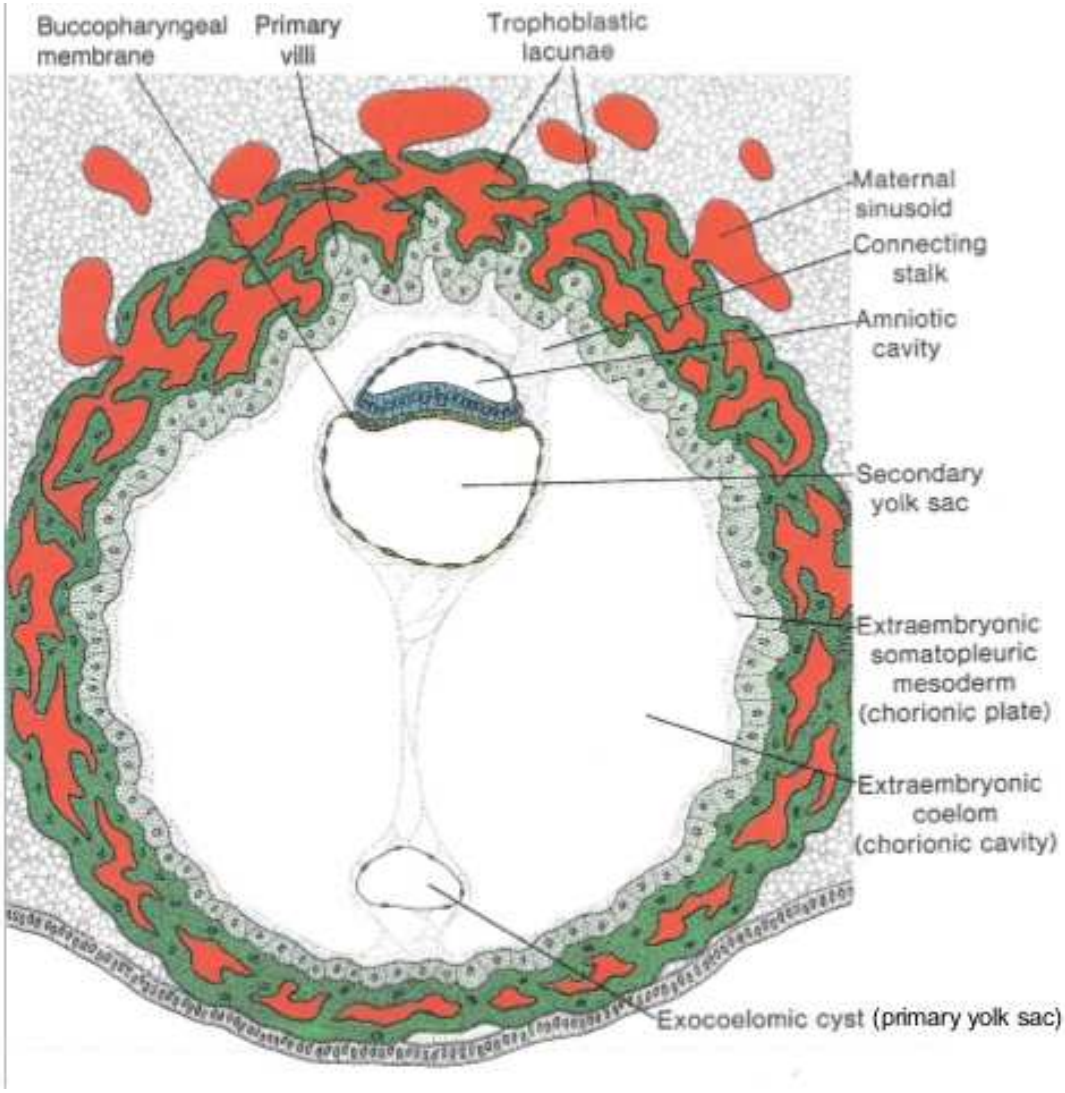
9th & 10th days



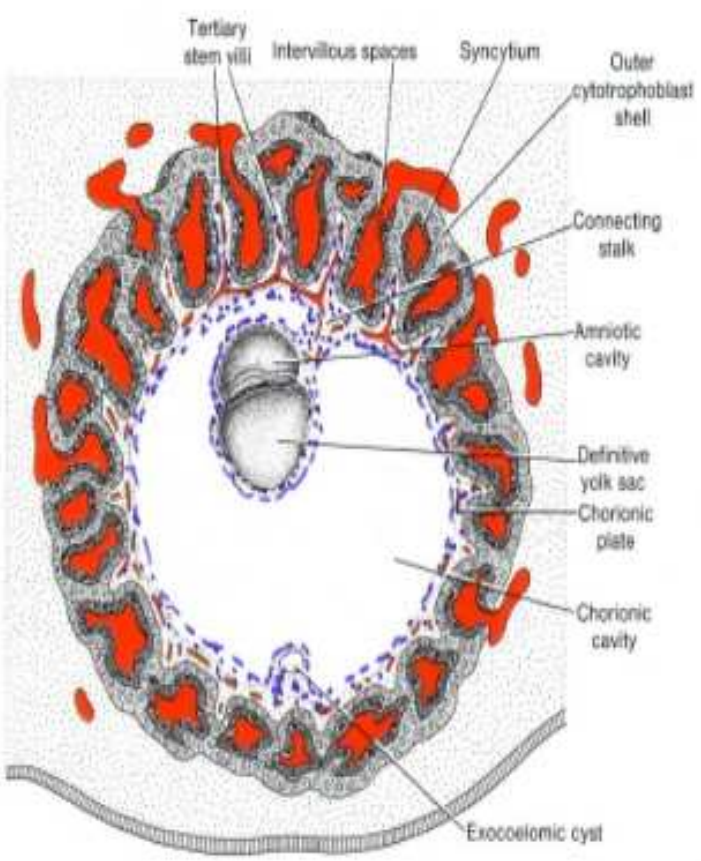
11th & 12th days

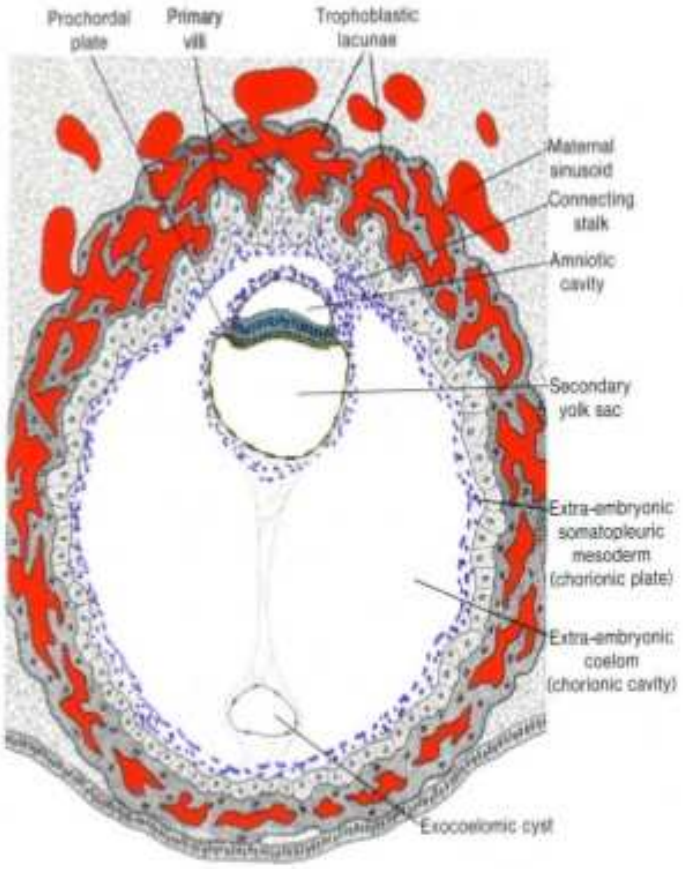


Day 13


Buccopharyngeal membrane
Primary villi
Trophoblastic lacunae
Maternal sinusoid
Connecting stalk
Amniotic cavity
Secondary yolk sac
Extraembryonic somatopleuric mesoderm (chorionic plate)
Extraembryonic coelom (chorionic cavity)
Exocoelomic cyst (primary yolk sac)

Chorionic Vesicle





Quiz

1. Between which two layers is the extraembryonic mesoderm located?

A. Exocoelomic membrane and cytotrophoblast
B. Epiblast and hypoblast
C. Syncytiotrophoblast and endometrium
D. Exocoelomic membrane and syncytiotrophoblast
E. Syncytiotrophoblast and cytotrophoblast

2. The amniotic cavity appears on the eighth day as a slit-like space between the trophoblast and the

a.Extraembryonic mesoderm

b.Embryoblast

c.Exocoelomic membrane

d.Connecting stalk

e.Chorion

3. The chorion is composed of the following except:

a.Syncytiotrophoblast.

b.Cytotrophoblast.

c.Splanchnic mesoderm.

d.Somatic mesoderm.

Thank you