



Fig. Sexual blastozoid salpa

Reproduction and alternation of generation:

The Salpa varies in two form during its whole life. The asexual phase (oozoid) which give rise to sexual form having both ovary and testis. The asexual form is solitary while sexual (blastozoid) form is gregarious. Both phases alternates with each other.

Sex-organs:

Salpa is protogynous i.e. ova mature first. The ova is unpaired and placed near the right side of nucleus. The oviduct is located near the junction of Stalk and the atrium lie on dorsal side.

The testis is pair of tubular branched structure placed near nucleus on each side of the intestine.

Each testis open in the atrium by its individual ^{pore} pore.

Fertilization

The fertilization is internal and the animal plays an important role. The sperms discharged by the other Salpa are sucked through the atrium and reach in its lumen where they fertilize the mature ovum. Soon after the fertilization the Oviducal opening is closed and a sac like follicle for the ovum is formed by the ovarian epithelium.

Development and life cycle:

The cleavage is holoblastic. The development is direct and takes place within the body of the animal inside follicle formed by the atrium. The follicular cells nourish the embryo by

two methods — (a) by the formation of the placenta,
(b) the proliferation takes place in the lateral and dorsal follicular cells which later on migrate among the blastomeres and intermingle to form the gonoblastic Kalymnocytes.

The development continues gradually. The embryo escapes out by rupture of the atrial wall and lies freely in the atrial space with the only parental placental condition.

Further development and nature of various organs are not well known. But few things are very clear:

- 1) The ganglion is mesodermal in origin but later on overlapped by the ectodermal diverticulum of the pharynx.
- 2) The sub-neural glands are endodermal in origin.
- 3) The stolon develops as a diverticulum of the postero-ventral wall of the pharynx. The stolon develops a chain of 50-100 zooids.

Later on constricted part gradually atrophies and zooids remain adhere with the processes of the body wall and the feet. Soon all the zooids are set free.