

# Comparative anatomy and structural organization of kidney in vertebrates /

## Tripartite concept of kidney organization

### Embryonic development:

(What is nephric ridge?)

1. The kidney formed within the intermediate mesoderm located in the dorsal and posterior body wall of the embryo. This posterior region during the onset of differentiation expands, a nephric ridge that protrudes slightly from the dorsal wall of the body cavity.

This nephric ridge is a nephrogenic region, meaning it is the embryonic source of the kidneys and their ducts.

Nephric ridges are flexible and not committed to one type of kidney or another.

(What is nephrotome?)

2. The embryonic forerunner of the uniferous tubule is known as nephrotome. It remains in paired and often segmented and contains the nephrocoel (a coelomic chamber that may open via a ciliated peritoneal funnel to the coelom).

3. Rest of the embryonic developmental stages can be presented in the following steps as follows:-

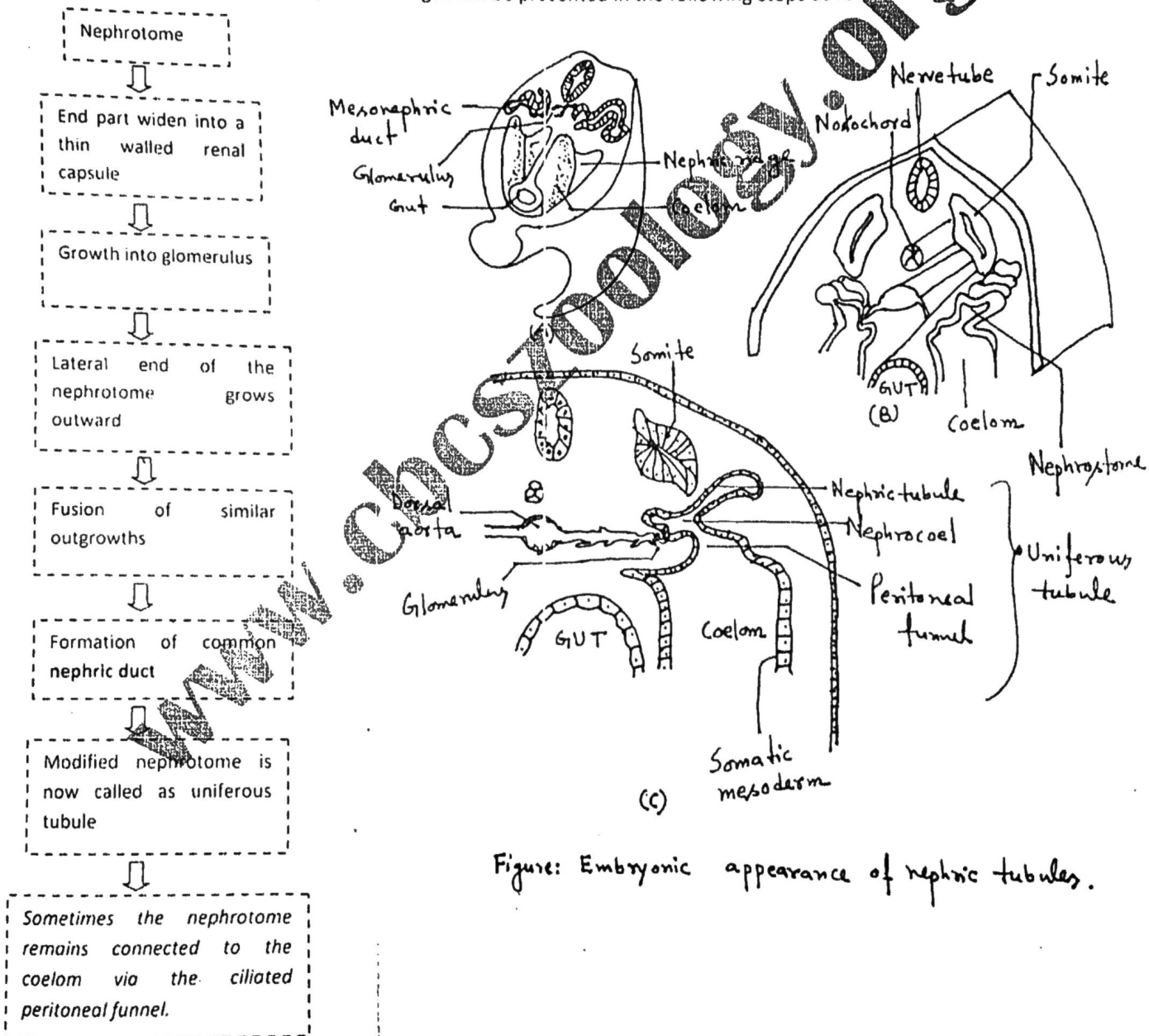


Figure: Embryonic appearance of nephric tubules.