

Histological Study for embryological development of Mesonephros in Chick embryo of *Galus galus*

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Abstract :

The study aimed to shed light on the histological developments of the mesonephros in broiler chicken embryos because of the economic importance of animals for the purpose of research results to benefit from future improvements in disease resistance and the selection of the best environment for breeding of beneficial generally healthy and economically.

The broiler *Gallus gallus* embryos were used in the study by 5 normal embryos for each age are taken every 24 hours and the study included the following ages (5-19) on incubated and extracted the embryos and fixed in Carnoy's fluid to be ready for histological preparation and microscopically examination. Histological development of embryos has been following by measuring the diameters of mesonephros and glomerular diameter and thickness of layers of Bowman's capsule as well as secretory tubules diameters (proximal tubule and distal tubule) and disposal tubules (collecting tubule and renal channel).

Observed the mesonephros on the fifth day of incubation, but were of glomeruli is not sheathed by Bowman's capsule that arose later when the seventh day of incubation, and was higher diameter has a record of the ninth day and then returned to fade and disappear when the fourteenth day-old embryo after it passed the process of programing cell death.

Recorded increase in diameter of glomerulus until the end of the thirteenth day of incubation to disappear in mesonephros with it disappearance. Also recorded an increase in the diameter of the secretory and disposal tubules with age during the embryonic stages studied and in different proportions.

We can deduce through the results of the present study that arise in the mesonephros on the fifth day of incubation and disappear in the fourteenth day.

The study also reported that the kidney suffers from programing cell death during embryonic development.