

- Document Type** : Thesis
- Document Title** : Comparative Anatomical and Histological Studies on Kidneys of Acartilaginous Fish (*Rhizoprionodon acutus*) and Ateleosts Fish (*Epinephelus chlorostigma*)
وإحدى (*Rhizoprionodon acutus*) دراسات مقارنة تشريحية ونسجية لكلى إحدى الأسماك الغضروفية (*Epinephelus chlorostigma*) الأسماك العظمية
- Document Language** : Arabic
- Abstract** : The two kidney in *Rhizoprionodon acutus* are elongated bodies with dark red in colour lying longitudinal on both above ciliary cavity on the sides of dorsal artery, each kidney is divided into three portions: an anterior, middle and posterior one, the two kidney of *Epinephelus chlorostigma* are differ to *R. acutus* kidney, they divided into three portions also: anterior, a middle and posterior one. The anterior part of the kidney (head kidney) was laying outside the peritoneal cavity in close proximity to the pericardium, the other portion are elongated and appear as rods and the posterior portion of the rod is more wider and appear on its lateral and separated these two rods posteriorly to connected with each other. This part constitute about one third of length of the kidney. Posteriorly of this portion. There is the middle and with constitute right crinkled lateral in shape while the posterior portion which occupied one fluid of the kidney length which is spiral in shape and more thick in thickness than another portion. The anterior part of the kidney of *E. chlorostigma* consist mainly from lymphatic tissue mixed with haemopoietic, while in *R. acutus* found only lymphoid cells, malpighian body not found in this portion. The malpighian body of *E. chlorostigma* differ from those of *R. acutus*, these are weak and seemed to be disappear. The tubules consist of two portion, proximal convoluted and distal convoluted tubules and collecting tubules are found in the portion of the anterior and middle portion of the kidney of each fishes. Wolffian duct of each fishes appear through the kidney tissue except the last part of last portion near the ventral portion. The lymphatic tissue as dispersed cells found between the urinary tubules of *E. chlorostigma*, while the kidney of *R. acutus* is lack of these cells except on the anterior part. The interrenal and chromaffin tissue are intermingled mostly associated with the posterior cardinal vein in *E. chlorostigma* only, to facilitate easily their secretions on the blood stream. Moreover pigment cells which distributed between the previous tissue, also Stannius corpuscles were observed on the dorsal surface of the last quarter of the kidneys of *E. chlorostigma*, but they are and not observed in *R. acutus*.
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