



## **Investigating the cause of abdomen enlargement in a Goldfish (*Carassius auratus*) in Tehran**

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### **Abstract:**

A goldfish (*Carassius auratus*) was referred to Ornamental fish clinic of faculty of veterinary medicine of university of Tehran due to enlargement of abdomen area, in 30 May 2020. The fish was kept in a glass container for 5 years lonely. The abdomen was greatly enlarged and the body looked like a triangle from above, but the scales did not protrude and there was also mild exophthalmos. Diagnostic imagining (sonography technique) was used to diagnosis the cause of this complication. Diagnostic imagining showed several cystic areas with different size that were full of fluid in both kidneys. Based on the evidence, polycystic kidney was recognized and due to the severity of the complication the fish was euthanized. Polycystic kidney is a common complication in some fish that kept in captivity such as goldfish and rare affliction in feral fish populations, and its occurrence in a deteriorated environment may provide further evidence of a link between fish health and environmental quality, but according to history of the case in this study, it seems that it occurred cause of genetically reasons.

**Keywords:** Abdomen, enlargement, Goldfish, Tehran