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The First CaseReport of SPRING VIRAEMIA OF CARP from Indian carp spp in iran

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Objective:
Spring viremia of carp (SVC) is an important disease affecting cyprinids, mainly common carp Cyprinus carpio and Indian carp. Designated a notifiable disease by the Office International des Epizooties, SVC is caused by a rhabdovirus, spring viremia of carp virus (SVCV).The genome of SVCV is composed of a single molecule of linear, negative-sense, single-stranded RNA containing 5 genes in the order 3\'-NPMGL-5\' coding for the viral nucleoprotein, phosphoprotein, matrix protein, glycoprotein, and polymerase, respectively.SVC outbreaks are most common in farmed carp. BLAST searches performed with the predicted amino acid sequence .

Method & Materials:
The research samples were selected among Indian Carp with the symptoms of SVC (kidney swallowing, exophthalmia, general petechiae, bronchi mottling, mouth inflammation, ascites, spotting bleeding on adipose tissues) under perishing between May 2006 and September 2007. Viral RNA extraction was done by RNXplus buffer as described by manufacturer (CinnaGen, Iran). Briefly, about 1 cubic mm of fish tissue was transferred to 1.5 ml micro tube, then 200 µl RNX plus buffer was added. The mixture was incubated for 5 min at 40C.Initial characterization of svcv cDNA

clones was achieved by performing gapped BLASTN and BLASTX searches .

Results & Conclusion:
Samples were screened by molecular and sequence analysis assays.in this research we confirmed the positive SVC in 3 Indian carp spp (Ruho,Merigal,catla catla) and sequencing DNA of genes in positive samples with confirmation in gene bank ,and 2 sites in this research were placed in(Ahvaz) khozestan and (astaneh ashrafieh) Gilan Aquaculture farms .university of shahid beheshti confirmed Mulecular tests with Nested–PCR and sequencing in gene bank with Blast software programe. It was the first transportation of Indian carp from foreign country to Iran.The results of this study indicate that SVC infection can be found in some Indian carp in Iran. To study the pathogenicity and to obtain isolates of SVC virus the establishment of a laboratory with virus culture equipment is necessary . The respect for on-site hygiene rules, control of disease in fish propagation and breeding centers, isolation and quarantining of infected Indian Carp or fish with abnormal behaviour have a major role for the prevention of disease. Often, one of the most important causes of little incidence of disease is also the weakness of viruscarriers (Haghighi et al 2007). With Gene Sequencing technique, the virus genome is recognized perfectly.

Keywords: SVC - Sequencing - PCR - Gene bank - Indian carp - Iran

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