

Diseases of Arowana

When a fish is placed in a artificial environment from its natural habitat, the chances of the fish getting disease is high. The stress due to the changed environment and also other stress factors like different feeding regime from the natural habitat and bad water quality management will also cause the fish to acquire disease. Therefore, one should be aware that keeping the stress level low is the best way to prevent disease rather than curing the fish after it acquired the disease.

Generally the dragon fish have a great resistance against diseases so long as they are not weakened by bad treatment, such as spoilt food, polluted and contaminated water, lack of oxygen, sudden change in water temperature, or other conditions the result of human negligence and ignorance that will cause stress and injury to the fish. Remember that the fish remains healthy as long as it is allowed to live in an environment to which it has adjusted.

The List below are some of the more common diseases associated with the dragon fish, their symptoms and suggested remedies.

1. Tilted (overturned) Gill Covers

Cause

- a. Fouled water as a result of rotting food particles and excretions. The strong presence of NH₃, NO₂ and NO₃ can reduce the content of oxygen in the water.
- b. Space constraint - When the Dragon Fish is growing, it not only needs nutrition, it also needs a lot of room to move about. Otherwise, the gill covers may be affected. They may tilt over.
- c. Change in temperature - The temperature of the water in the aquarium should always be maintained. The sensitive gills can be affected when it is either too hot or too cold suddenly.

Symptoms

At the initial stage, the movement of the gill covers is not regular and breathing is also faster and abnormal. Next, the gill covers may become concave and the edge may curl upwards, causing the gills to be exposed in the water. Finally, at the serious stage, the fish pushes its head up constantly to the surface for air while at the same time loses its appetite. This means the internal gills have become damaged and probably infected with bacteria, affecting the function of breathing and this can lead to death eventually.

Cure

When it is first discovered that the Dragon Fish is not breathing properly, the water should be changed immediately. Every 2 to 3 days, 20% of the water in the aquarium should be changed. Air pump should be further activated and air bubble stones could be added so that oxygen level in the aquarium could be increased. Also, change the filter media to coral sand.

Next stage

When the edge of the gill cover is slightly curled but not yet hardened, other than

changing water, and increasing air/oxygen supply, strong water current could be created. There may be 50% chance of a cure without the need to operate.

Final stage

When the gill cover is tilted and hardened exposing the gills, the only way left is to trim off the tissues of the tilted region. Tools needed are scissors, surgical spirit, gloves, plastic bag and a rubber sheet. Also water-proof fine sand paper to polish clean the gill cover affected by cut tissues. The above tools must be properly sterilised.

When all equipment have been properly treated, the Dragon Fish should be transferred to a smaller fish-tank leaving the original tank to be filtered and pumped with air to increase oxygen content. With 1/3 of water in the small tank, anesthesia should be administered within the plastic bag which contains the sick Dragon Fish. It must be established prior to the operation that the Dragon Fish has completely lost consciousness before it can be removed (take care not to cause dehydration). Then use a clean pair of scissors to trim the edge of the gill covers.

After cutting, it is necessary to apply antiseptic medications to the trimmed edges. The Dragon Fish should be promptly put back into its own aquarium to await its regaining of consciousness. More antiseptic medication may be added to prevent wound from being infected with bacteria.

When it regains consciousness, switch off all lights and allow the Dragon Fish to recuperate. Feeding can be stopped if it has no appetite. Additional equipment may be fitted to create waves in the aquarium. The cut portion must grow again before the operation is considered successful.

2. Cloudy Eyes

This can be caused by:

- a. Eye-injury as a result of bad handling
- b. Contaminated water

Symptoms

Initially, one eye may appear cloudy. It then becomes moldy as though a membrane is hanging over it. Eventually, the eyes may swell and are covered with blueish white foreign matter. At this stage, if they are not treated may result in death or blindness.

Cure

At the initial stage 1/3 of water should be changed and coarse salt should be added.

Water temperature should also be increased to 30°C to 33°C. Observe for 2 days. If condition improves, water should be changed every third day (1/4 of water) and more salt may be added until complete recovery. At the intermediate stage, medications may be needed to bathe the fish in. Such medications will have their own instructions to be adhere to on application. When eyes become moldy, recovery may take 3 to 5 months. If swelling subsides, medication may be reduced or stopped eventually. After recovery, eyes may appear smaller but that should be normal.

3. Protruding Scales Disease

This often occurs when Dragon Fish is young. The adult Dragon Fish seldom gets affected by this disease.

Cause

- a. Events causing extreme temperature changes within the aquarium.
- b. Contaminated water.

Symptoms

Initial stage - Scales tilt at every 5th to 8th scale. Blood traces may be seen at the root of scales. If not arrested at this stage, scales will gradually tilt, redness may appear and the scales will not be able to protect body causing bacteria attacks to the body of the Dragon Fish. The scales may all drop off causing the body to decay and the fish to die.

Cure

Add coarse salt and increase temperature to 32°C to 34°C. Increase oxygen content in the water and change water (1/4) every 3 to 4 days. Water may be heated prior to change. Add copper sulfate medications to the water.

4. Rotting Gills Disease

Caused by a type of parasite which cannot be seen by the naked eye. These parasites hide in the gills sucking and absorbing all the nutrients from the Dragon Fish. The cells of these parasites multiply speedily at 25°C. This disease is highly contagious.

Cause: Polluted water or water which has not been changed for a long period.

Symptoms: The fish is breathing very fast and its color is dull.

Cure: Similar to that of the "White Spots" Disease (see section on the ["White Spots" disease](#))

5. Stomach Ailments

This occurs when fish is very young - mainly due to eating stale food or it may have been injured by the sharp pincer of the prawns causing the internal wall of the stomach to be infected with bacteria, resulting in a swollen belly.

Symptoms

Initial stage - Swollen stomach with a red swollen anal region. At the advanced stage, the Dragon Fish may be seen to have lost its balance dipping its head downwards.

Cure

At the moment cure is limited, but commercially available fish medications may be given and water may be changed with temperature increased by 2°C to 3°C.

6. 'Red Spots' Disease

This is often regarded as a terminal disease and it affects mostly young fishes.

Symptoms

Red spots occur on the lower back portion of the body. Early stage - patches of red spots, gradually swelling occurs, scales are upturned and finally the fish may slowly rot to death.

Cure

Try increasing temperature to 36°C plus bathing it with fish medications available commercially.

7. Parasites

Most of these parasites come from the live food that are used to feed the Dragon Fish and are passed to the Dragon Fish during feeding. The parasites that affect the Dragon Fish are mainly the fish lice and the anchor worm.

Fish lice

Approximately 3 to 5 mm long, can be seen with the naked eye on the external body. It has a flattened body shell. It has a needle-like structure at the mouth to suck out the body fluid causing the fish to lose its lusture, at the same time causing the fish to be uncomfortable, scraping the side or bottom gravel of the aquarium.

Anchor worm

Found mainly around the fins or within the body of the fish. The head of the worm is forked and it sucks the nutrients from the fish directly. The length is about 1 cm. The affected region is often red and swollen with traces of blood and then decay sets in. An affected fish may appear to be irritable, scraping and rubbing against the sides of the aquarium and losing its appetite in the process.

Cure

The above parasites can be killed by using copper sulfate medications. The fish lice can also be gotten rid of by keeping the Dragon Fish in a concentrated salt solution. Oxygen content should be increased in the aquarium during this soaking period.

Note: Once the Dragon Fish has been infected by parasites, the tank must be sterilised.

8. 'White Spot' Disease

This disease is very common among fishes. It originates from a type of ICH bacteria. It can multiply alarmingly fast, and can flourish at body temperature 25°C from a single cell to 3000 over cells in a hour. Under high temperature, it can stop multiplying and even die.

Cause

ICH bacteria only attack the fish with low resistance. The bacteria suck up the body fluid of the fish. The affected region looks like white powder.

Symptoms

At initial stage, the disease affects mainly the fins. The fish that has been infected with this disease tends to scratch itself against the sides or bottom of the aquarium to rid its itch. Its appetite deteriorates greatly and fin ends starts to rot. Lastly when it attacks the gills, the fish may die.

The illness should be arrested at once as it is highly contagious.

Cure

1. 1% salt
2. 0.8 gm of Quinine in every litre of water.
3. Use available commercial preparation from Aquarium shops.

Warm the water by increasing by 2°C to 3°C in temperature and adding air-pumps to increase the oxygen level in the aquarium.

In the process of treatment, the Dragon Fish should be fed nutritious food so as to build up its physical resistance. Upon recovery, it is advisable to disinfect the entire aquarium.