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Lecture title: White Skine diseases

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Summary: **Definition** Bacterial disease mainly affected silver and big head carp, the causative agent was ***Pseudomonas dermoalba*****,** the disease characterized by:

- Early stage of the disease is began from the region between the dorsal and tail which skin appear white in color later (final stage) the whitening lesion extend from the dorsal region and anal fin
- Fish left its tail at in swim,
- mortality rate reach to after 2-3 days of the infection or the appearance of the symptoms.

Treatment

1- mercuric acetate 2mg / liter for 2-5 hour.
2- Euromycine 12 – 5 mg / liter for 1/2 hour

Bacterial Enteritis of Grass and Black Carp

Definition It is a wide distribution disease of 1-2 years old fish, its mortality may reach 90%, the disease cause by *Pseudomonas fluorescence intestinalis*, characterized by :

- Loss of appetites,
- hemorrhagic enteritis
- Swelling and hemorrhage on anus
- Release clotted blood mixed with yellowish mucoid material from anus when press on abdomen,
- The swim bladder is dark to black in color
- accumulation of fluid in the abdominal cavity

Treatment

Sulfaquindain 1gm / 10 kg food in the first day then 0.5mg / 10 kg food for 10 day late

Gills Diseases

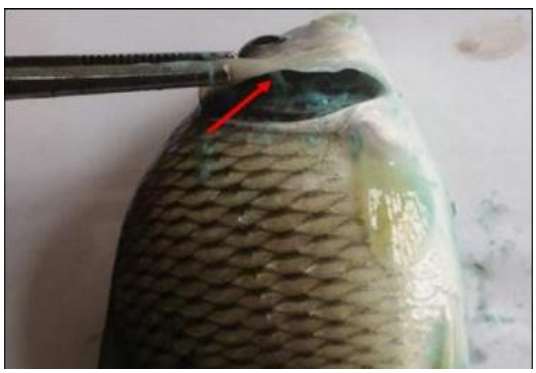
Definition It's a chronic to acute disease, affect primarily cultured and aquaria fishes. Disease characterized by respiratory and osmoregulatory impairment., also called proliferative gill disease

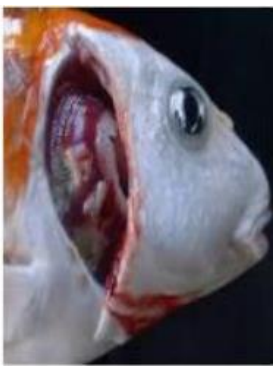
Gills disease is caused by several agents:

1- Myxobacteria (*Flavobacterium branchiophilum*) in combination with unfavorable environmental conditions. This type termed (bacterial gill disease)
2- Deficiency of pantothenic acid. This type is called nutritional gill disease.
3- Chemical pollution or pesticides (hemorrhagic gills diseases)
4- Mycosis gill necrosis in pond fishes , gill rot
5- Proliferative gill disease of unknown etiology

Clinical Signs / pathological lesions

1- There are clinical signs of respiratory disturbances
2- Fish was lethargy, loss food intake
3- Fish swimming near water inlet and surface
4- In early stages, the gills may be hyperemic, with swollen primary lamellae. Increased mucus may trap debris
5- Strands of mucus may trail from the gills.
6- Later, gill lamellae may be hyper trophy and fused (these also features of nutritional gills diseases)
7- Hemorrhagic gills disease have sand –grains size aneurysms in the gills capillary





Treatment and control: 1. Treatment and control depend on etiology of the disease. 2. Stress factors must be removed. 3. Good management of the fish farm. 4. External disinfectants are used for treatment such as potassium permanganate 100mg/l for 30 second 5. Antibiotics used for treatment of bacterial gill diseases.