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Summary sheet for *Aeromonas* spp infections

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Aetiological agent/s

A. veronii bv. *sobria*, *A. hydrophila* and *A. salmonicida*

Epidemiology

Host/s (species: age): European seabass (*Dicentrarchus labrax*) mainly affected; juvenile and grown fish. Also isolated in mixed infections from various diseased fish e.g. gilthead seabream (*Sparus aurata*), sharpnose seabream (*Diplodus puntazzo*), common pandora (*Pagellus erythrinus*) and common dentex (*Dentex dentex*).

Morbidity and mortality rates: Variability among cases. Generally, low daily mortality (0.5-1%). Cumulative mortality during outbreaks may reach 20%. Long term, cumulative mortality of affected fish may reach 80%.

Transmission: Horizontal

Factors (environmental, others) for disease outbreak: Outbreaks often occur at seawater temperature > 21°C. Also, stress induced; from sudden deterioration of environmental conditions or transportation of fish.

Clinical signs

Lethargy and loss of appetite. Icteric (yellowish) appearance and internal haemorrhages in the case of *A. veronii* bv. *sobria*. Darkening of fish colouration, haemorrhagic spots and/or ulcerative lesions. Internally, enlargement of the spleen is common among different *Aeromonas* spp. infections. Multiple abscesses on spleen, liver and kidney in fish affected by *A. veronii* bv. *sobria* and *A. salmonicida* subsp. *masoucida*/ *achromogenes*.

Samples to be collected for diagnostics

Moribund whole fish. Target organs for microbiology/histology: the kidney and spleen.

Presumptive diagnostics analysis

Disease signs and/or mortality of fish vaccinated for vibriosis and photobacteriosis. History of elevated water temperature or stress factors. Low daily or sudden high mortality.

Splenomegaly.

Bacterial cultures fully grown on TSA 2% NaCl at 48h, 25°C. No growth on mediums supplemented with 4% NaCl. Resistance to the vibriostatic agent O/129 and ampicillin. Generally, no or limited growth on TCBS. Biochemical diagnostic kits may identify up to genus level.

Confirmatory diagnostic analysis

PCR (ISR, GCAT, *gyrB*, *rpoD*)



Enlarged spleen with multiple abscesses, *A. veronii*-European seabass