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La mayoría de las enfermedades bacterianas de los peces son causadas por cuatro géneros de bacterias: *Aeromonas*, *Yersinia*, *Chondrocyclus* y *Vibrio*. El medio ambiente acuático abarca una amplia variedad de parámetros, estos deberán estar siempre dentro de los límites aceptables ya que de lo contrario podrían predisponer o incluso causar alguna enfermedad en los peces.

Las bacterias pueden ser la causa de grandes pérdidas en el cultivo del bagre. Estos organismos han sido considerados como los patógenos más importantes de los peces y un alto porcentaje de muertes es más bien relacionada con enfermedades crónicas que con agudas. Las mortalidades causadas por bacterias frecuentemente son asociadas con ambientes de "stress" cuando dichos organismos son usualmente saprofitos, facultativos u oportunistas.

El papel de los microorganismos es muy variable, puede ir desde un patógeno primario hasta un invasor banal del huésped y con frecuencia la muerte del pez suele ocurrir por otro proceso patológico.

El agua es un medio ideal para el crecimiento bacteriano, sobre todo cuando contiene un exceso de materia orgánica. Diversos investigadores han demostrado que la flora bacteriana normal de los peces es el reflejo directo de la flora bacteriana del agua en que viven.

Las bacterias son microorganismos de pequeñas dimensiones; generalmente entre 0.5 y 10 μ m. Por lo tanto, se requiere de un microscopio para su estudio. El material procedente de peces enfermos sólo determina la presencia o ausencia de microorganismos; pero es imposible determinar por este medio la especie de bacteria a que pertenece y si es patógena o inocua.

En resumen para identificar una bacteria se requiere además de la observación microscópica, cultivarla en diferentes medios y observar su comportamiento bioquímico. Para determinar esto último, es necesario asegurarse de que el estudio se hace a partir de un cultivo puro y de ser posible, obtener este a partir de una célula.

Las bacterias se encuentran ampliamente distribuidas en la naturaleza. Se pueden detectar en el aire, agua, plantas y en los animales. Las bacterias que se encuentran en la piel o en el intestino de los peces pueden ser saprofitas y sería un grave error considerarlas como la causa de una enfermedad sin tener suficiente evidencia. Los órganos internos de los peces sanos con excepción del intestino no contienen bacterias; por lo tanto, si estas se detectan en corazón, hígado u ovarios, hay la posibilidad

CAPÍTULO 11

ENFERMEDADES BACTERIANAS