Detection of Listeria monocytogenes in wild and cultured Nile Tilapia fish (Oreochromis niloticus)

Rania Zaki, Ashraf Abd El-Malek

Abstract:

In the present study one hundred random samples of wild and cultured (50 each) of fresh Nile Tilapia fish (Oreochromis niloticus) which were purchased from fish sale markets in Assiut City. These samples were subjected to bacteriological examination for determination their contamination by Listeria spp. The obtained microbiological results showed that the overall incidence of Listeria spp. were 22% and 16% in the examined wild and cultured Nile Tilapia fish samples, respectively. The identified Listeria spp. were L. monocytogens (6 and 10%). Concerning the other Listeria species, 11 isolates, nine isolates (19%) were L. ivanovii, one isolate (2%) were L. seeligeri and one (2%) isolate were L. welshimeri. In conclusion, the obtained results revealed that some wild and cultured Nile Tilapia fish was contaminated with L. monocytogenes; this pathogens could pose a serious risk to public health. It is thus necessary to perform continuous surveillance for L. monocytogenes in aquatic fish in Assiut.

Keywords:

wild tilapia, cultured tilapia, Listeria monocytogenes

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