Kuru

National Institute of Neurological Disorders and Stroke (NINDS)

Source

National Institute of Neurological Disorders and Stroke (NINDS). Kuru Information Page.

Kuru is a rare and fatal brain disorder that occurred at epidemic levels during the 1950s-60s among the Fore people in the highlands of New Guinea. The disease was the result of the practice of ritualistic cannibalism among the Fore, in which relatives prepared and consumed the tissues (including brain) of deceased family members. Brain tissue from individuals with kuru was highly infectious, and the disease was transmitted either through eating or by contact with open sores or wounds. Government discouragement of the practice of cannibalism led to a continuing decline in the disease, which has now mostly disappeared.

Kuru belongs to a class of infectious diseases called transmissible spongiform encephalopathies (TSEs), also known as prion diseases. The hallmark of a TSE disease is misshapen protein molecules that clump together and accumulate in brain tissue. Scientists believe that misshapen prion proteins have the ability to change their shape and cause other proteins of the same type to also change shape. Other TSEs include Creutzfeldt-Jakob disease and fatal familial insomnia in humans, bovine spongiform encephalopathy in cattle (also known as mad cow disease), scrapie in sheep and goats, and chronic wasting disease in deer and elk.