CHOLERA

Pages with reference to book, From 150 To 150

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The face was sunken as if wasted by lingering consumption, perfectly angular and rendered peculiarly ghastly by the complete removal of all the soft solids, in their places supplied by dark lead-coloured lines; the hands and feet were bluish white, wrinkled as when tong maccrated in cold water; the eyes had fallen to the bottom of their orbs and evinced a glaring vitality, but without mobility and the surface of the body was cold[1].” 4 description of cholera patient given by an ancient physician still holds true. Cholera is characterized by diarrhoea, abdominal pain, tormenting thirst, fainting fits, vomiting, slowed pulse, cyanosis, the profuse outpouring of fluid from the intestine, often amounting to 15 percent of body weight within a few hours. So much water and electrolytes leave the body that blood becomes thickened and reduced in volume so that there is insufficient blood flow to keep vital organs such as the kidney working properly. Many people die unless the lost fluid is replaced promptly. Cholera has been known since antiquity under the name of "cholera nostras" Asiatic cholera, native to the Ganges delta, is much more dangerous and was referred to as “bisuchika” in Sanskrit literature. The Hindu name for this remorseless disease was "mordechim" roughly translatable as bowel death. The disease remained endemic in the frontiers of Bengal until 1817, then restricted to Asia until 1828, then it spread along the sea routes via Arabia and Egypt to Europe. in 1883 Robert Koch isolated the causative agent of cholera in Alexandria. In 1892 epidemic of cholera reached Hamburg (neighbouring Altona with its modernized water supply was hardly affected) and cholera claimed 10,000 victims. The hygienist Max Von Pettenkofer (1818-1901) regarded the etiology of cholera as an equation with several unknown quantities which had to be solved by research. Pettenkofer recognized that Koch had found the etiological agent, the comma bacillus, but believed that transmission of the disease to the human body must involve other factors. lie had cultures of comma bacillus sent from Hamburg and drank these on 7th October 1892 without really becoming infected with cholera. Although his stools contained cholera bacilli in pure culture, he did not fall seriously ill, thus proving the correctness of his theory. The danger of cholera could be excised if hygiene in the cities was generally improved by better sewerage, a clean water supply, refuse removal and so forth[2]. An epidemic that broke out in Celebes in 1961 and reached its climax in 1971 was caused by an organism discovered in Egypt in 1905 and resembling the vibrio comma. This was the vihrio cholerae, which is transmitted by contaminated water and fish from polluted rivers and lakes and has been classified since 1961 by World Health Organization as a cholera causing organ ism. Members of the genus vilrio are facultative anaerobic asporogenous gram negative rods that are motile by sheathed polar flagella. Within the genus vibrio there are 12 clinically significant species causing intestinal and extraintestinal infections. Intestinal infections are caused by V. cholerae, vibrio parahaemolyticus, V. mimicus, V. hollisae, V. furnissii, V. fluvialis, V. alginolyticus and V. vulnificus. The most commonly encountered species are cholerae and parahaemolyticus Vibrios also cause extra-intestinal infections that range from simple wound infections to lethal septicaemia and the species incriminated with such infections are V. vulnificus, V. alginolyticus. V. carchariae, V. cholerae, V. cincinnatiensis, V. damsela, V. metschnikovii, V. mimicus and V. parahaemolyticus. Isolation of vibrio choierae 01 from diarrhoeal cases is always significant clinically or epidemiologically. Clinically cholera may range from asymptomatic colonization to severe life threatening diarrhoea. Many patients have mild diarrhoea lasting for 1-5 days, followed by spontaneous recovery without specific therapy. On the other extreme patients may experience severe diarrhoea with massive fluid loss leading to dehydration, electrolyte imbalance and death. Cholera is often thought as severe life threatening illness occurring in developing nations of the Indian subcontinent and the Middle East. However the eltor biogroup of V. cholcrae 01 is currently

predominant with this biogroup the milder form of illness is seven times more common than severe cholera. In 1988 the WHO reported 44,120 cases of cholera from 30 countries. Non 01 V. cholerae is commonly ftund in aquatic environments and most infections due to the organisms are apparently of environmental origin. It is quite likely that the infections we attribute to V. chokrae may be due to the environmental strains and not the classical type which is usually epidemic in nature.

REFERENCES

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