

Food and water-borne disease. Alan Macfarlane

Dysentery.

Bacillary dysentery is 'an acute infection of the bowel, caused by organisms of the Shigella group and characterized by frequent passage of stools containing blood, pus and mucus, accompanied by abdominal cramps, tenesmus, malaise and fever.' 'The source of infection is the excreta of infected individuals. Organisms are spread from person to person by the direct fecal-oral route. Indirect spread by contaminated food and inanimate objects is common, but water-borne disease is relatively rare. Flies serve as mechanical vectors.' It is particularly serious in the case of young children. 'Epidemics occur most frequently in overcrowded populations with inadequate sanitation.'¹

The second major branch is amoebic dysentery, one part of what is often termed 'Amebiasis'. This is 'An infectious disease caused by Entameba histolytica, producing a colitis characterized by the painful passage of bloody mucoid stools...'² 'Infection is acquired by ingestion of food or drink contaminated by faeces containing amoebic cysts...Transmission may involve direct contact with unwashed hands, or contamination of food. Extensive water-borne epidemics have resulted from faulty hotel and factory plumbing. Where proper latrines are not used, the cysts may be carried mechanically on the legs of flies and cockroaches, or in their vomits or dejecta. The use of human faeces for fertilization of vegetables and fruits or the washing of these foods in polluted water leads to infection when produce is eaten raw.'³

The unpleasant nature of dysentery is indicated by a description of its symptoms. 'Dysentery, a form of disease accompanied by discharges from the bowels - attended by marked fever and pain, as also by the presence of blood and inflammatory products in the discharges...The most distinctive symptoms are excessive pain in evacuating the bowels...tenderness on pressure in the left side of the abdomen, discharges of blood mixed with mucus, and comparatively little faecal matter; these symptoms being accompanied or followed by intense fever, passing early into depression of strength. After the acute symptoms have passed off, the disease sometimes continues in a chronic form for a long period, greatly enfeebling the patient.'⁴

Typhoid.

¹ Merck, Manual, 822

² Merck, Manual, 826

³ Merck, Manual, 826

⁴Chambers' Encyclopedia, s.v. 'Dysentery'

Typhoid is equally painful. Its symptoms are described as follows. (APPENDIX a-water) 'The onset is generally gradual, the patient complaining of weariness, headache, sickness, or diarrhoea for some days before he is compelled to take to bed...All the usual symptoms of the feverish state succeed; the temperature generally reaches 103oF sometimes 105o or 106o...The digestive organs are much disturbed; sickness and vomiting are frequent at the beginning of the attack; there is almost always some discomfort and tenderness in the abdomen; and diarrhoea, though not a constant, is a very characteristic symptom, Generally during the second week the characteristic rash appears...Some cough is very frequently present. Delirium may be absent throughout, but when present is apt to be very severe and troublesome. The feverish usually lasts about three weeks, by the end of which time the patient is very thin and weak. Death may take place by coma, by exhaustion, in consequence of severe hemorrhage from the bowels or of perforation of their coats, or from pneumonia or some other complication; rarely from any cause before the second week.' (Chambers, Encyclopedia, s.v. Typhoid).