INJURY TO THE CHEST PRODUCING SIGNS
OF ABDOMINAL INJURYFREDERICK G. DYAS, M.D.
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History.—Mr. F. A., aged 30, was shot from below, by a person standing on the sidewalk, the bullet going through a window and striking him in the right lumbar region. The patient was brought to the hospital, and presented the appearance of considerable shock, with marked abdominal pain and rigidity. The abdominal findings were those of peritoneal injury with marked distention, tenderness and pain. The pulse was 100, temperature 99 F. The patient was prepared for operation and taken to the operating-room, but refused operation at that time, it being 2 o'clock in the morning. The following morning at 9 o'clock, the symptoms not having abated, the patient was again consulted and urged to submit to operation, to which he consented.

Operation.—The abdomen was opened in the middle line above the umbilicus, and the liver, gall-bladder, stomach, spleen and the intestines, were carefully gone over without finding any evidence of injury to them or any fluid or intestinal contents in the peritoneal cavity. A second incision was made below the umbilicus, and the abdominal contents examined through this incision, without finding any lesion. Examination of urine, having been made without finding any blood or albumin, it was felt that the kidneys had escaped injury, and the abdomen was closed up, with drainage.

Subsequent Course.—The following day the patient developed a slight elevation of temperature and the temperature continued to increase on succeeding days, until he had a daily temperature of 101 F.

Physical examination of the chest revealed the pressure of fluid in the pleural cavity on the same side as the injury. The patient made a quick recovery from his laparotomy wounds. The findings in the chest cleared up after three weeks and the patient was discharged as cured.

The explanation of the clinical findings of injury to the peritoneal contents, I believe, lies in the fact that the diaphragmatic portion of the pleura was injured and infected, and the pain was transferred to the abdomen, as is so frequently observed in lower lobe pneumonia.

I believe that with the symptoms above enumerated, no surgeon would have been justified in leaving the abdomen unopened, and that we have no means at our command at the present time of discriminating between a wound of the pleura which produces abdominal symptoms, and a wound of the abdomen itself.

Sanitary Control of Public Milk-Supply.—"The importance of controlling the quality of the public milk-supply," says Prof. E. O. Jordan (*Science*, June 2, 1911), "although frequently urged by sanitarians, is not always appreciated. At the present time, in a great majority of American cities, it is safe to say that for every case of infectious disease due to drinking-water, ten cases are caused by infected milk. It is difficult to secure adequate funds for the sanitary control of the milk-supply. By sanitary control of milk is meant, not the upholding of a rigorous standard of butter-fat and total solids, but the maintenance of proper standards of cleanliness and health for dairy cows and especially the safeguarding the milk free from infection during collection and transportation. Under some conditions the protection of the consumer against milk-borne infection may be best brought about by compulsory pasteurization of that portion of the milk-supply which cannot otherwise be raised to proper standard. Whatever method of control may be adopted, it is certain that any genuine improvement in the character of a milk-supply will be followed in the long run by a lessening in the amount of typhoid fever and to some extent tuberculosis. The early detection of a single case of typhoid fever or scarlet fever on a dairy farm may be the means, not only of preventing an extensive epidemic, but of avoiding the formation of scores of new foci which can . . . light up subsequent cases for many years."

TherapeuticsCHOLERA INFANTUM; SUMMER DIARRHEA OF
INFANTS

Probably both of the designations at the head of this article will soon be entirely banished from scientific nomenclature. At the present time, however, it is convenient to use them, even if they are not scientifically accurate, to indicate a class of diseases which are seen during the hot weeks of summer. It was formerly the custom to limit the use of the term "cholera infantum" to attacks of diarrhea with watery movements, accompanied by vomiting and great prostration, which came on suddenly, and often resulted in death. At the same time it was the custom with many physicians to apply the name to all cases of diarrhea with vomiting seen in young children, so that the accounts given by medical men of this trouble have been more or less inexact. Not properly included within this class are the very large number of cases of diarrhea in children which come on more or less gradually and which often are not so severe as the cases previously spoken of. In some of these cases, besides the diarrhea, vomiting is a prominent symptom. In other cases, vomiting is nearly or completely absent. The movements frequently contain blood, mucus, or pus, and are accompanied by pain and tenesmus. The former class of cases are commonly designated as acute gastro-enteritis, the latter as enterocolitis.

ETIOLOGY

Several factors are obviously concerned in the production of these diarrheal disorders. Formerly, the high temperature prevalent during the greater part of July and August was supposed to have an important influence in causing the disease. More recently, with the increasing attention paid to the study of bacteriology, and especially to the study of the so-called intestinal flora, a fermentation of the food, produced by the growth and development of the bacteria, is believed to be the most important element in the production of these diseases. Now, it is assumed by many that the deleterious influence of the high temperature of the summer is chiefly productive of disease by encouraging the fermentation and putrefaction of the different articles presented to the child as food, and particularly causing the growth and development of bacteria in milk, with the consequent fermentation and putrefaction and production of various sorts of toxins. The etiologic factor of disease, "cold or chilling," to which so much was formerly attributed in causing disease, has been almost forgotten. Few now stop to consider that possibly the chilling of the surface of the body, during cool nights, or by exposure to drafts, may so interfere with the normal processes of digestion as to produce a gastro-enteritis.

PROPHYLAXIS

It is impossible to overestimate the importance of properly instructing parents and care-takers how to feed infants and young children so that they may avoid attacks of these disastrous diseases. It is not necessary to stop here to discuss the desirability of feeding infants at the mother's breast until they are at least 6 months old, and perhaps a year old. The occurrence of diarrheal diseases in breast-fed infants is infrequent, and the mortality is very slight. A common grave mistake in the feeding of children under 2 years old is to give them everything which the adults of the family eat,