Peritonitis due to Bacillus Anthracis: A Case Report from Bangalore, India

Beena PM*
Nalini J*
Ashok Nayak**
Sandhya Belwadi, MD, DCP*

ABSTRACT

Anthrax, a zoonotic disease has caused epidemics in live-stock and human beings since time memorial. The disease has been eradicated in animals following extensive vaccination programmes. Human infection with Bacillus Anthracis usually manifests in one of the three clinical forms: Cutaneous, Pulmonary or Intestinal. Meningitis and septicaemia are the known complications of any of these clinical forms. Sporadic cases have been documented from all over the world. The most severe and rare form of Anthrax is the gastrointestinal type and to date there are only ten reported cases. We report a case of peritonitis due to B anthracis.

THE CASE

An eleven year old girl was admitted, with severe abdominal pain, fever and vomiting of three days duration. On examination, the patient was in shock, had acidotic breathing and was drowsy. The abdomen was distended, soft, no rigidity or guarding and feeble bowel sounds were present. X-ray abdomen revealed diffuse haziness in pelvis and distended small bowel loops with air fluid levels. Large bowel gas patterns were not seen. There was no gas under the diaphragm. Ultrasound of abdomen also showed marked ascites with distended bowel coils and thickened wall. There was a history of consumption of infected pork from a dead animal and occupational handling of carcasses. A provisional diagnosis of Tuberculous ascites/Intestinal obstruction was made. However, no diagnosis of intestinal anthrax was made. Peritoneal fluid was sent to the Microbiology laboratory for routine culture and sensitivity. Direct examination of the peritoneal fluid revealed the presence of B anthracis which was confirmed by culture and guinea pig virulence test.

DISCUSSION

The anthrax problem has to a large extent been solved in countries like the UK and USA, it continues to persist in several parts of the world like Africa, the Middle East and Asia. In these countries anthrax has remained enzootic. With nomadic migration of animals and persistently contaminated soil, intensive vaccination programmes have not been effective in the control of the disease. Furthermore, a means of effective control of anthrax in susceptible wildlife has not been designed. In addition to this, accurate figures on the incidence of anthrax are not easily available in these areas due to undependable reporting of cases. Anthrax is still endemic in certain parts of the world4 and sporadic case reports of anthrax have been documented from India. Incidentally, this is the second case report of intestinal anthrax from India.5 Thus, our experience illustrates the serious manifestation caused by B anthracis and would emphasise its importance and awareness among the medical professionals.

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^{*} Department of Microbiology

^{**}Department of Surgery M.S. Ramaiah Medical College Bangalore, India.