

Acute abdomen-like presentation of swine flu: Two case reports

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Abstract

This report is about two cases of acute abdomen-like symptoms that proved to be due to swine flu. Two patients above 60 years of age, with cardiac and respiratory chronic disease, presented with acute abdominal pain. One of them was subjected to abdominal exploration that revealed functional colonic obstruction. The diagnosis of H1N1 was made later upon development of respiratory symptoms. In the other case the diagnosis of H1N1 was made preoperatively, and conservative management was pursued.

Once H1N1 was suspected, viral culture was performed and found positive. Acute abdominal symptoms were relieved in both cases by administration of Oseltamivir. Acute abdomen-like presentation of H1N1 Influenza is rare. Suspecting such a diagnosis is crucial to save patients with an H1N1 Acute abdomen-like presentation unnecessary surgery. Cure of the patient and prevention of disease spread depend on accurate diagnosis of H1N1. Surgeons should be aware of the possibility of presentation with acute abdomen-like symptoms, during an H1N1 outbreak.

Introduction

Influenza A/H1N1 (2009), commonly named Swine flu, has caused a furious epidemic in Egypt over the last few months. The typical manifestations include fever, headache, sore throat, rhinorrhea, chills, and muscle aches.¹ Gastrointestinal symptoms (nausea, vomiting, diarrhea or stomach ache) are uncommon,^{1,2} although diarrhea has been reported.³ A report of four cases of influenza associated with severe abdominal pain and collapse was published in 1891.⁴ Moreover, Influenza

B was reported to cause abdominal symptoms in children.⁵

However, we have not found any published reports of acute abdomen-like symptoms as a presentation of Influenza A/H1N1.

Here, we present two cases of acute abdomen-like symptoms caused by H1N1. It is a presentation of special importance; as acute abdominal manifestations

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are considered an indication for referral to surgeons. Patients may be subjected to unnecessary explorations. Moreover, the diagnosis of Influenza A/H1N1 may be missed or delayed, with all the consequences of delay or denial of treatment.

Case Presentations

Case 1

A 66 years old lady with a history of bronchial asthma presented with absolute constipation of 3 days duration. She was suffering from acute abdominal pain. On examination, there was abdominal distension, rigidity, tenderness and profound rebound tenderness mainly on the left hypochondrial, lumbar and iliac regions. Intestinal sounds were exaggerated and PR showed an empty rectum.

Abdominal plain x-ray and CT scan films showed mild dilatation of the stomach, dilatation of the proximal jejunum with marked dilatation of the transverse colon, splenic flexure and proximal descending colon. The patient had gallstones, previously diagnosed and demonstrated on abdominal ultrasound. The abdominal ultrasound gave no additional information. The preoperative diagnosis of intestinal obstruction was settled. Consequently, exploratory laparotomy was carried out.



Figure 1: Abdominal plain x-ray in the erect position of case 2, showing mild dilatation of the stomach, marked dilatation of the proximal jejunum and a dilated transverse colon, with multiple fluid levels.

Abdominal exploration showed only transverse and left colonic distension, a picture suggestive of functional colonic obstruction. During the operation, the anesthetist noticed that the patient had respiratory embarrassment. Therefore, the patient was transferred to the ICU post-operatively. In less than 48 hours, the patient improved and was transferred to the surgical ward. One day later, she developed sore throat, and subsequently, dyspnea, tachypnea, and chest pain, and was transferred to the ICU once again. Later on the same day, she developed cough and fever (T 37.8°C).

Swine flu was suspected. H1N1 viral culture was positive. The patient started Oseltamivir tablets, and showed an excellent response. Two days after treatment she was moved back to the ward and noticed to have mild diarrhea. The patient recovered on medical treatment and was discharged a week later after subsidence of all manifestations.

Case 2

A 65 year-old man was admitted with an acute abdomen-like presentation. He complained of severe abdominal pain and constipation. His grandson had H1N1 ten days before and had been treated successfully. The patient first went to a Day Case Center and was given Oseltamivir, considering his history of H1N1 contact.

The patient had a history of open heart surgery, and open cholecystectomy through a right paramedian incision.

On Examination, there was abdominal distension, tenderness and rebound tenderness on the left side of the abdomen, mainly the left lumbar and iliac regions. Intestinal sounds were exaggerated and PR showed an empty rectum.

Plain x-ray and CT scan of the abdomen showed a picture similar to that of case 1 (Fig 1 and 2). Several hours after admission, the patient developed cough, with expectoration and fever (T 38° C). Oseltamivir was continued with parenteral antipyretics and fluids, and the patient kept on NPO (Nothing by mouth).

H1N1 viral culture proved positive. One day later, the patient demonstrated marked improvement. He passed



Figure 2: Abdominal plain x-ray of case 2, in the supine position, showing marked dilatation of the proximal jejunum and a dilated transverse colon.

stools and flatus and his abdominal manifestations markedly resolved. He was discharged on the third day in good shape.

Discussion

Acute abdomen-like symptoms have not been reported before as a presentation of Influenza A/H1N1 (2009). Such a presentation was reported with influenza B in children,⁵ and in the influenza pandemic of 1889-1891,⁴ caused by an H2 virus or H3-like virus.⁶

This has to be suspected when cases with acute abdominal symptoms present without evidence of mechanical intestinal obstruction. A few hours later

patients would develop low grade fever, sore throat and chest manifestations characteristic of Influenza A/H1N1. Age may be a factor to consider in suspecting the diagnosis. The H1N1-acute abdominal presentation is probably commoner in or even restricted to older patients.

Such a suspicion would be crucial to save patients with H1N1-Acute Abdomen-like presentation unnecessary surgery. Additionally, early diagnosis of H1N1, with early management is the cornerstone for patient cure. Early detection initiates measures to contain the infection and prevent its spread. Consequently, surgeons should note an unusual underlying cause of acute abdomen-like presentation in an H1N1 outbreak.

References

1. Centers for Disease Control and Prevention (CDC). Swine-origin influenza A (H1N1) virus infections in a school—New York City, April 2009. *MMWR* 2009; **58**: 470-472.
2. Cao B, Li X-W, Mao Y, *et al.* Clinical Features of the Initial Cases of 2009 Pandemic Influenza A (H1N1) Virus Infection in China. *NEJM* 2009; **361**: 2507-2517. <http://dx.doi.org/10.1056/NEJMoa0906612>
3. Tulloch F, Correa R, Guerrero G, *et al.* Profile of the first cases hospitalized due to influenza A (H1N1) 2009 in Panama City, Panama, May-June 2009. *J Infect Dev Ctries* 2009; **3**: 811-816.
4. Simon RM. Cases of Influenza with severe abdominal pain and collapse. *BMJ* 1891; **1**: 1275-1276. <http://dx.doi.org/10.1136/bmj.1.1589.1275>
5. Kerr AA, McQuillin J, Downham MA, Gardner PS. Gastric flu, Influenza B causing abdominal symptoms in children. *Lancet* 1975; **i**: 291-295. [http://dx.doi.org/10.1016/S0140-6736\(75\)91205-2](http://dx.doi.org/10.1016/S0140-6736(75)91205-2)
6. Dowdle WR. Influenza A virus recycling revisited. *Bull World Health Organ* 1999; **77**: 820-828.