Unusual Abdominal Pain
R Gudena, N Khetan, M Gilleece, L Jenkinson

Citation

Abstract
Acute myeloid leukaemia presenting with acute abdominal pain is very rare and it causes diagnostic dilemma in the General Surgical ward. We report a case of a 58-year-old female presenting with upper abdominal pain. Initial investigations showed low haemoglobin and thrombocytopenia with normal white blood cell count. Peripheral blood film and bone marrow aspirate confirmed the diagnosis of acute myeloid leukaemia. She was treated with chemotherapy and achieved complete remission.

ABBREVIATIONS
AML - Acute myeloid leukaemia
MRC - Medical research council

INTRODUCTION
Acute myeloid leukaemia (AML) is a haematological malignancy which needs to be diagnosed early and treated aggressively. In the United Kingdom there are 2000 new cases annually, of which 1400 are over 60 years old (1). Intensive chemotherapy leads to complete remission in 50-60% of patients over 60 years but the 5-year survival is only 20-30%. AML typically presents with recurrent infections, bleeding or symptoms of anaemia. Acute Myeloid Leukaemia presenting acutely with severe abdominal pain and normal white blood cell count is rare. We describe a rare presentation of AML presented with severe abdominal pain and normal white blood cell count.

CASE REPORT
A 58-year female was admitted to the surgical ward with severe upper abdominal pain for 6 days associated with bilious vomiting for 3 days. Past history included open cholecystectomy, hysterectomy and medically controlled hypertension.

On examination she was tender in the epigastrium and right upper quadrant. There was no organomegaly or abnormal masses. Bowel sounds were normal. Initial investigations revealed Hb:7.8 g/dl, WBC:9.8 x10^9/, MCV:102.3 fl, MCH:33.2pg, Platelets:78 x 10^9/l. U&E s Na:139, K: 2.9, CRP:19. She was transfused 3 units of blood. Abdominal X-ray, Ultra sound scan upper abdomen and gastroscopy revealed no abnormalities. The peripheral blood film revealed cells with high nuclear cytoplasm ratio typical of myeloblasts. A bone marrow aspirate (figure 1) confirmed the diagnosis of AML with myeloblasts accounting for 65% of nucleated cells and largely replacing the normal myeloid and erythroid progenitor cell population. The patient consented to enrolment on the MRC AML 14 trial, which aims to improve treatment outcomes in AML. She achieved complete remission without any major complications of therapy. Interestingly her abdominal pain resolved spontaneously after the initial cycle of chemotherapy. Her remission lasted 10 months and she is currently in a state of relapse and is being maintained on supportive transfusions.

DISCUSSION
Acute myeloid leukaemia is a malignant tumour of haemopoetic precursor cells of non-lymphoid lineage. This
is the most common type of acute leukemia in adults. The patients are usually anaemic and/or thrombocytopenic at presentation with a peripheral leukocytosis. Acute presentation due to complications of these features is common. Presenting symptoms are usually recurrent infections, haemorrhage and or anaemia. Treatment is given as a combination of cytotoxic drugs and in some instances, allogeneic or autologous bone marrow transplantation. Abdominal pain, such as typhlitis, colitis or toxic megacolon is well recognised as a complication of chemotherapy induced neutropenia following treatment for AML (2-3). Primary presentation with abdominal pain and normal WBC count in a case of AML is rare. Thus, the case we have reported is very different from the usual presentation of AML. Such a presentation can cause diagnostic dilemma in an emergency. This type of presentation is very rare and very few cases were reported in the literature (4).

CORRESPONDENCE TO

Dr Ravindra Gudena MRCS SHO General Surgery Gwynedd Hospital Bangor United Kingdom LL57 2PW E-mail: gudenar@yahoo.com Tel : (0044)7753750667

References

1. Cartwright RA, Alexandra FE, Mc Kinney PA et al Leukemia and Lymphoma; An atlas of distribution within areas of England and Wales.
Author Information

R. Gudena
Department of General Surgery/ Haematology, Gwynedd Hospital

N. Khetan
Department of General Surgery/ Haematology, Gwynedd Hospital

M.H. Gilleece
Department of General Surgery/ Haematology, Gwynedd Hospital

L.R. Jenkinson
Department of General Surgery/ Haematology, Gwynedd Hospital