Early detection of chronic myeloid leukaemia (CML) in primary care: a case report

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SUMMARY

Chronic Myeloid Leukaemia (CML) characterised by the Philadelphia chromosome (BCR-ABL1 fusion gene) is a myeloproliferative neoplasm that may present with non-specific symptoms and accounts for about 15% of adult leukaemia. **Case Presentation:** A 38-year-old Malay man with a history of childhood asthma presented with a 3-month history of intermittent cough, pleuritic chest pain, and sore throat. The patient has previously visited two other clinics and was prescribed a 5-day course of antibiotics without any investigations performed. He has denied constitutional symptoms such as fever, weight loss, or night sweats. On examination, he was afebrile with a full GCS and haemodynamically stable. His throat was injected without tonsillitis, and lung auscultations revealed equal air entry. No hepatosplenomegaly. A full blood count was done and revealed an alarming leucocyte count of 305.6x10^9/L, with all raised absolutes of neutrophil count 243.6x10^9/L, lymphocytes 12.2x10^9/L, monocytes 13.8x10^9/L, basophils 26x10^9/L and eosinophils of 10.1x10^9/L with mild anaemia of haemoglobin 12.8 g/dL (Mentzer Index: 25) and normal platelets, raising suspicion for a haematological malignancy. The patient was urgently referred to a nearby tertiary hospital and was confirmed to be diagnosed with CML Stage 1 within two days of extensive investigations. Prolonged cough is a common primary care presentation, often attributed to infectious or inflammatory causes. However, persistent symptoms alongside striking leucocytosis necessitate screening for haematological disorders such as CML.This case highlights the importance of vigilance in primary care for non-specific symptoms potentially indicating malignancy. A systematic approach to prolonged cough with appropriate investigations can facilitate early diagnosis plus treatment initiation and intervention, improving patient outcomes.