Indigestion or infection? Unusual presentations of malaria in general practice

R.C. FLEETCROFT

SUMMARY. Two cases of vivax malaria which presented atypically as abdominal pain are described. They highlight the need to consider malaria in the differential diagnosis of any acute febrile illness in a patient returning from an endemic malarial area.

Introduction

VIVAX malaria usually presents with symptoms of fever, myalgia, headaches and chills.[1] Two cases are described here which presented with abdominal pain as the prodromal symptom.

Case 1

An eight-year-old Asian girl presented with abdominal pain for one day. This was described as a burning pain in the upper abdomen, constant but not severe. She had no other symptoms. She had returned from holiday in mid-Pakistan 13 weeks previously and had taken no malarial prophylaxis.

On examination she had a pyrexia of 37.2 °C. Examination of the abdomen, heart, chest and central nervous systems was normal. In particular, there was no hepatosplenomegaly. She had a red right ear drum. Urinalysis and examination of the urine was normal.

Two days later the patient developed shaking attacks and a pyrexia of 38.7 °C. Abdominal examination remained normal. Parasites of vivax malaria were easily seen on a blood film.

She was treated with a three day course of chloroquine, followed by 14 days of primaquine. Her symptoms resolved within 24 hours of commencing therapy.

Case 2

A 17-year-old Asian woman presented with abdominal pains for three days and shaking attacks for one day. The pain was described as abdominal discomfort but not severe. She had returned from holiday in mid-Pakistan 14 weeks prior to these symptoms and she had taken no malarial prophylaxis.

On examination she had a pyrexia of 39.2 °C. Examination of the abdomen, chest, heart and central nervous systems was normal and in particular there was no hepatosplenomegaly. Urinalysis and examination of the urine was normal. Parasites of vivax malaria were easily seen on a blood film.

She was treated with chloroquine and primaquine. Her symptoms resolved within 24 hours of commencing therapy.

Discussion

These two cases highlight several important points. First, the incubation period for vivax malaria is quoted in the literature as 12 to 17 days[2] but incubation periods are commonly prolonged by partial immunity, chemoprophylaxis or partial chemotherapy. Indeed, only one third of all cases of vivax malaria present within one month of returning from the malarial area and some strains of vivax malaria may have incubation periods of as long as 637 days.[2] The two cases described here presented with incubation periods of 13 and 14 weeks, respectively.

Secondly, the clinical presentation of malaria is varied and often unusual.[3] Malaria is a disease of the blood and as blood visits every organ of the body almost any symptom can result. The only constant sign is fever unless the patient is desperately ill.[3] These two cases presented with fever and epigastric discomfort which is not a common presentation in vivax malaria, although a recognized feature of falciparum malaria.[4]

Thirdly, these patients had not taken prophylaxis against malaria because they thought they were still immune, in common with the relatives they had visited in Pakistan. People living in a malarious area can acquire partial immunity following repeated exposure to infection, but it is rarely complete.[2] Everyone living in this country who intends to travel to a malarious area should take chemoprophylaxis.

These two cases indicate that any febrile illness in someone who has recently returned from a malarial area may be malaria, regardless of clinical presentation.

R.C. Fleetcroft, MRCP, MRCGP, general practitioner, Hemsby, Norfolk.

© *Journal of the Royal College of General Practitioners,* 1989, 39, 253.

References

1. Gilles HM, Phillips RE. Malaria. *Medicine International* 1988; 54: 2221.
2. Weatherall DJ, Ledingham JGG, Warrell DA (eds). *Oxford textbook of medicine.* 2nd edition. Oxford University Press, 1987.
3. Gilles HM. Malaria. *Medicine International* 1984; 2: 143.
4. Maegraith BG. Malaria. In: Adams MB, Maegraith BG (eds). *Clinical tropical diseases.* 8th edition. Oxford: Blackwell, 1984: 276.

Acknowledgement
I thank Dr Unnikrishnan for his help in preparing this manuscript.

Address for correspondence
Dr R.C. Fleetcroft, The Medical Centre, Kings Court, Hemsby, Norfolk NR29 4EW.

RCGP
INFORMATION TECHNOLOGY CENTRE

The Centre aims to provide general practitioners with experience and practical advice on computers and computer software. This can range from specialized general practice systems to general business applications. Some specialist systems are maintained within the Centre and demonstrations can be arranged upon request. The Centre also organizes monthly computer appreciation courses which are open to general practitioners and their practice staff.

Information Technology Manager: Mike Hodgkinson, RCGP, 14 Princes Gate, London SW7 1PU. Telephone 01-581 3232.