

CARTA AO EDITOR

A CASE OF TRANSIENT ORGANIC BRAIN SYNDROME DURING QUININE TREATMENT

Quinine has become again the mainstay in treatment of multidrugresistant falciparum malaria in the eighties. During quinine treatment minor side-effects frequently occur whereas serious side-effects such as irreversible deafness and amblyopia are rare. Using normal or low doses of quinine a syndrome termed as cinchonism is commonly observed. Mild forms consist of tinnitus, headache, nausea and visual and auditory disturbances. Here we describe a case of transient organic brain syndrome which occurred during quinine treatment.

In Rio Branco, State of Acre, Brazil, a 24 year old woman suffering from falciparum malaria was given oral quinine treatment consisting of 500 mg quinine sulfate three times a day. From the third day of therapy, the patient developed headache, blurred vision, vertigo, tinnitus and impaired hearing. Owing to misinstruction the patient took a daily dosage of 1.5 g quinine sulfate continuously for 16 days, even though symptoms of apathy and disorientation appeared. On day 16 the patient was admitted to the Ministry of Health's outpatient clinic. A thick blood smear was negative, liver and spleen were of normal size, axillary temperature was 37.0°C and the patient was not pregnant. During examination the patient was generally awake but sometimes with reduced clarity of awareness of the environment. Often she had difficulties in shifting, focusing and sustaining attention. Her speech was limited and sparse, her thinking often incoherent without the usual direction towards a goal. Both short-term and long-term memory functions were severely impaired. The patient was disorientated with respect to time, place and her own identity. Her capacity of judgement was altered accompanied by an increased suggestibility. Affect,

mood and subjective wellbeing seemed to be unchanged. Psychomotor activity was slightly decreased without any signs of anxiety or suspicion. On the day of admission quinine medication was stopped. Daily observation revealed a continuous reduction of symptoms during a seven day period. Only a retrograde amnesia remained. Severe neuropsychiatric states are infrequent side effects of cinchona alkaloids and related compounds. However, although mefloquine had not yet been widely used, an acute brain syndrome after mefloquine intake is reported¹.

Furthermore a quinidine induced delirium has been described². To our knowledge this is the first report of a transient organic brain syndrome occurring during quinine medication. For us this syndrome was considered to be caused by quinine for the following reasons:

1. Lack of psychiatric disorders in the patient's history and her family's history.
2. Development of clinical features during quinine intake.
3. Cessation of symptoms after discontinuation of the treatment which corresponded to quinine's terminal half life.
4. No evidence of further psychiatric disorders during six months of follow up examinations.

REFERENCES

1. Harinasuta T, Bunnag D, Wernsdorfer WH. A phase II clinical trial of mefloquine in patients with chloroquine - resistant falciparum malaria in Thailand. Bulletin of the World Health Organization 61:299-305, 1983.
2. Summers WK, Allen RE, Pitts FN Jr. Does physostigmine reverse quinidine delirium? Western Journal of Medicine 135:411-414, 1981.

Address: Dr. Peter G. Kremsner. Landesinstitut für Tropenmedizin Berlin, Königin Elisabeth Strasse 32 - D-1000 Berlin 19.

Recebido para publicação em 10/2/89.

Peter G. Kremsner, Gertraud M. Zotter
Landesinstitut für Tropenmedizin Berlin, West Germany
Michael Bach, Wolfgang Graninger
Universitätsklinik für Chemotherapie Wien, Austria