

PREFACE

It is a great pleasure for me to present this Atlas as requested by the Authors.

Giovanni Swierczynski and Maria Gobbo are highly experienced parasitologists who have been collaborating for many years with our Center for Tropical Diseases, instituted in 1989 by the “Fondazione Don Giovanni Calabria per le Malattie Tropicali”. Maria and Giovanni have been in charge of uncountable training courses on parasitology, basic laboratory for the Tropics and malaria microscopy organized in our Center and elsewhere. Jointly with all our staff, they have given an outstanding contribution in making our Laboratory for Tropical Diseases a referral center for clinical parasitology in Italy. This work is the result of years of endless engagement by the two of them and the outcome is, I believe, the most comprehensive handbook on malaria microscopy that has been realized so far. It is principally meant as a Manual for all staff involved in malaria diagnosis, first of all in the Tropics. The importance of microscopy for the correct management of fever cases, in endemic areas, as well as for patients travelling from these areas, cannot be overemphasized. Unfortunately, good microscopy is rare. False positive and false negative results are a very common occurrence, as all tropical doctors know, and the consequence on patients' outcome may be fatal. Not surprisingly, in many endemic areas, doctors and nurses don't even consider lab results, even when a laboratory is available (which is often not the case), and thus manage febrile cases on the basis of clinical ground only. The main ambition of this Atlas is to give a contribution to the improvement of malaria diagnosis.

PREFAZIONE

È con grande piacere che presento questo Atlante su richiesta degli Autori. Giovanni Swierczynski e Maria Gobbo sono due parassitologi di grandissima esperienza che collaborano da parecchi anni con il nostro Centro per le Malattie Tropicali, istituito nel 1989 dalla “Fondazione Don Giovanni Calabria per le Malattie Tropicali”; Maria e Giovanni hanno tenuto innumerevoli corsi di parassitologia, laboratorio di base per i Paesi Tropicali e microscopia malarica, sia presso il nostro Centro che in altre sedi; hanno dato un contributo prezioso, assieme a tutto il nostro staff, a fare del nostro Laboratorio per le Malattie Tropicali un centro di riferimento per la parassitologia clinica in Italia.

Quest'opera è il risultato di un impegno incessante di entrambi, il cui risultato è, credo di poter dire, il più completo manuale di microscopia malarica finora realizzato. È principalmente inteso come un vademecum per tutto il personale che si occupa di diagnosi della malaria, anzitutto nei paesi tropicali. L'importanza della microscopia per la corretta gestione dei casi febbrili, sia nei paesi tropicali che con i pazienti che vi hanno soggiornato, non sarà mai sottolineata abbastanza. Purtroppo, una buona microscopia è merce rara. Risultati falsi positivi e falsi negativi sono comuni, come tutti i medici tropicalisti sanno, e la conseguenza sul destino finale del paziente può essere infausta. Non sorprende che in molte zone endemiche i medici o gli infermieri non tengano nemmeno conto del risultato di laboratorio (quando e se questo è disponibile) e trattino i casi febbrili solo in base agli elementi clinici.

La principale ambizione di questo Atlante è di dare un contributo al miglioramento della diagnosi di malaria. Per cercare di garantire

In order to ensure the widest distribution of this book in malaria endemic countries, a substantial effort was made to keep its price as low as possible.

To do so, the Authors have refrained from any form of remuneration and the Publisher, Mr. Gianfranco Zarantonello, worked for free for uncountable hours. Due to all this, it is possible to sell an Atlas of this outstanding quality at a price less than half that of similar books. As proposed by the Publisher himself an amount from the sale of each copy will be assigned to a field project on malaria research/intervention.

As a choice, no commercial sponsorship was sought for.

To conclude, I sincerely hope that this work will add its contribution to the endless fight against one of the heaviest plagues of human kind, and particularly of the poorest.

Dr. Zeno Bisoffi

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una larga diffusione nei paesi endemici è stato fatto uno sforzo considerevole per applicare il minimo ragionevole prezzo di copertina. Per riuscirci, gli Autori hanno rinunciato a qualsiasi compenso. Anche l'Editore, Gianfranco Zarantonello, ha lavorato a titolo gratuito per innumerevoli ore. Grazie a tutto questo, un Atlante di eccezionale qualità viene venduto a un costo di meno della metà rispetto a simili volumi. Per espressa indicazione dell'Editore stesso, dalla vendita di ogni copia, una quota verrà devoluta ad un progetto di ricerca/intervento sulla malaria.

Per scelta, non abbiamo cercato alcuna sponsorizzazione commerciale.

Concludo esprimendo la mia speranza sincera che quest'opera contribuisca alla lotta senza fine contro uno dei più gravi flagelli del genere umano, e soprattutto dei più poveri.

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FOREWORD

Malaria remains as the single most important parasitic disease in the tropic and subtropical regions of the world; in Africa alone, more than a million children die each year of malaria. There is a vast commitment of resources by international agencies and the scientific community in general for the development of control strategies as well as vaccines for control of this scourge of mankind. Clinical laboratories, both in the developing and developed world, are faced with new diagnostic challenges and the need for increased vigilance for the presence of malaria in their patient populations. To this end, many of the newer and useful diagnostic tests have a molecular basis which often are expensive to perform, require sophisticated equipment and well trained personnel, some or all of which may not be available where most needed.

The “gold standard” for malaria diagnosis has always been the demonstration of the parasites in thick and thin stained blood smears. Earliest efforts at producing illustrations of the malaria parasites in blood smears took the form of artistic color renderings of the organisms in the red blood cells. More recently, an increasing number of publications have utilized photomicrographs of the organisms providing microscopists with a truer picture of what parasites actually look like. The development of digital photographic technology has further enhanced this depiction of the various stages of the malaria parasites in blood smears.

The Atlas of Human Malaria by our Italian colleagues, Giovanni Swierczynski and Maria Gobbo, provides a new level of diagnostic assistance. These authors, through expert use of well prepared stained smears and excellent photomicrography, have provided

an in-depth visual presentation of the four (principal) species of human malarias including the remarkable variations in the dynamic morphology of the developing parasites which can be so troubling for the accurate diagnosis of infection. With more than 450 photomicrographs of the malaria parasites as well as related organisms of the genus *Babesia*, users of this Atlas can enhance their diagnostic capabilities through reference to the large number of images provided. In addition to the photomicrographs, the authors have provided detailed information on the biology and epidemiology of the parasite species, an excellent review of the techniques for preparing well stained blood films, and a series of photomicrographs demonstrating artifacts found in blood films which often are a source of confusion to the less experienced microscopist.

It is a pleasure to offer our congratulations to the authors for providing this timely and still needed reference to aid in the identification and better understanding of the human malaria parasites.

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