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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرونيلم





جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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A Study of Clinical Trends and Prevalance of Malaria in Abbasia Fever Hospital over a Period of Two Years(2016-2017)

Thesis

Submitted For Partial Fulfillment of Master Degree in Tropical Medicine

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List of Abbreviations

| Abb. | Full term |
|--------|---|
| AIDS | . Acquired immunodeficiency syndrome |
| ALT | . Alanine aminotransferase |
| AST | . Aspartate aminotransferase |
| CM | . Cerebral malaria |
| DNA | Deoxyribonucleic acid |
| EBLs | . Erythrocyte-binding-like proteins |
| EDTA | . Ethylenediaminetetraacetic acid |
| GDP | . Gross Domestic Product |
| GPI | . Glycosyl phosphatidy linositol |
| HIV | . Human immunodeficiency virus |
| HPA | . UK Health Protection Agency |
| IL | . Interleukin |
| INR | . International normalized ratio |
| IRS | . Indoor Residual Spraying |
| ITNs | . Insecticide-treated nets |
| MoHP | . Ministry of Health and Population |
| NCM | . Non-CM causes |
| PCR | Polymerase chain reaction |
| PfEMP1 | . P falciparum histidine-rich protein 1 |
| PfHRP2 | . P falciparum histidine-rich protein 2 |
| PT | . Prothrombin time |
| RBC | Red blood cells |
| RBM | Roll Back Malaria |
| RDT | Rapid Diagnostic Test |
| RHs | . Reticulocyte-binding protein homologues |
| RRT | . Renal replacement therapy |
| U/S | . Ultrasonography |
| WHO | . World Health Organization |



Introduction

() alaria caused by infection with protozoan parasites of the Plasmodium species (Caraballo and King, 2014). Plasmodium falciparum is widespread in Africa while P. vivax prevails over P.falciparum in South America, although P.malarie may occurs in all malarious countries its prevalence is generally low, P. ovale is spread in tropical Africa and P.knowlesi (rarely causes disease in humans) occurs only in forested areas of South East Asia (Beatrice et al., 2010).

Malaria is typically found in tropical and subtropical climates where the parasite can live. According to the latest World Malaria Report, 2017. there were 216 million cases of malaria in 2016 comparing to 211 million cases in 2015, while the numbers of deaths stood at 455,000 the same number in 2015. Africa had the high share by 90% of malaria cases in the world (WHO, 2017).

In Egypt, there has been no cases of locally transmitted malaria since June 14, 2014 between late May to mid June, 19 localy-acquired P. Vivax malaria cases were identified in one village in Aswan (Center for Disease Control and Prevention, 2014). But there are many imported cases that came from malarious areas and admitted to Abbasia fever hospital.

Malaria is transmitted via the bite of a female anopheles mosquito occurs mainly between dusk and dawn, other comparatively rare mechanisms for transmission include



congenitally acquired disease, blood transfusion, sharing of contaminated needles, organ transplantation and nosocomial transmission (Gruell et al., 2017).

The symptoms of malaria usually begin10 to 15 days after the bite of the mosquito (WHO, 2015) which typically include paroxysm of fever, shaking chills and sweats (every 48h or 72hours depending on species) associated with headache, vomiting and malaise (Tylor et al., 2012).

The complications are usually caused by P.falciparum which may manifested by cerebral malaria which exhibit neurological symptoms including abnormal posturing, nystagmus, opisthotonus, seizures, or coma (Bartoloni and Zammarchi, 2012). Other complications of malaria include metabolic acidosis, non-cardiogenic pulmonary oedema, severe anemia, acute respiratory distress syndrome and renal failure (Tylor et al., 2012).

These complications occur mainly in risk groups for malaria including pregnant and lactating woman, infants, children under 5 years of age and patient HIV\AIDS as well as non immune migrants (WHO, 2015).

Malaria is typically diagnosed by microscopic examination of blood using blood films and antigen based rapid test (RDT) (Abba et al., 2011) methods that use the polymerase chain reaction (PCR) to detect the parasite DNA have been developed but not widely used due to their cost (Nadjm and Behrens, 2012).

AIM OF THE WORK

To study the prevalence, Clinical charactristics, risk factors and laboratory characteristics, type of medical treatment and pattern of response of malaria in patients that attended to Abbasia Fever Hospital over a period of two years (2016, 2017).