

Health Check

Date : 13th August 2015



```
_atrk_opts = { atrk_acct:"CI7WI1aE+GW170", domain:"docbeecee.co.uk",dynamic: true};  
(function() { var as = document.createElement('script'); as.type = 'text/javascript'; as.async = true;  
as.src = "https://d31qbv1cthcecs.cloudfront.net/atrk.js"; var s =  
document.getElementsByTagName('script')[0];s.parentNode.insertBefore(as, s); })();
```

Welcome to the Health Check page where Dr Chireka looks at health issues making the headlines. Dr Chireka will investigate the latest discoveries in the health sector and explain how you can benefit from the information. He believes in calling people to action and be prepared to take home something that you will put to use. Please feel free to contact Dr Chireka if you have any comments or questions. The email to use is info@docbeecee.co.uk

Bloodless test for malaria

By Dr Brighton Chireka

I am excited with the way innovation is proceeding in the health industry. Results from a study involving The Gambia (Medical Research Council Unit, The Gambia), Lithuania , the UK and the United States, led by Dr Dmitri Lapotko, Director of the Nanobubble Lab at the Department of BioSciences at Rice University in the US ,have shown that it's possible to test for malaria without taking blood.

The new laser test can detect malaria in seconds with a simple skin scan. It is the first in-human device to diagnose the disease without drawing blood. This means that those who faint or are scared of having blood tests can now be diagnosed of malaria stress free.

I know that in most parts of Africa they rarely test for malaria but rely on good history taking and examination to come up with a diagnosis of Malaria. This has advantages and disadvantages in that it's cheaper and quicker to do but there is a risk that some people may wrongly be treated for malaria when they do have other serious life threatening conditions. It's sad that whilst the developed world is advancing in technology , Africa is struggling to catch up in this innovation due to the underfunding of its health systems.

It's interesting how the device works. It works by sending a safe laser pulse through the skin to blood vessel. Here , if the malaria is present then tiny parts of malaria parasites will absorb the laser light. This causes the tiny parts of malaria parasites to instantly heat up and produce a microscopic vapour. When this vapour bubble bursts , it produces an acoustic 'pop' which is detected through the skin by a sensor , indicating the presence of malaria.

It was reported that this fast, non-invasive test can detect malaria in both humans and mosquitoes. It has advantages over current techniques because it does not depend on blood sampling, reagents, facilities or trained personnel. The simplicity – it can be operated by non-medical personnel – and sensitivity of the test mean it could be a low-cost, safe and universal tool for clinical and field diagnoses.

I hope this device will be made available to Africa especially Zimbabwe at a very low cost so that it can be used by nurses in rural areas such as Gokwe and Binga. This may be a wishful thinking as the manufacturers of the device may want to recover their costs of making the device. I call upon the World Health Organisation to fund the use of this device which will make a lot of difference in our rural areas. We know that people are sadly at times being wrongly treated for malaria but with this device it will be a thing of the past.

Please feel free to leave me your comments as usual, I enjoy reading them.