

Recently authors from India have commented that HIV infection is associated with increased risk of severe malaria even with normal CD4<sup>+</sup> counts; however the severity of disease and mortality are not increased.<sup>2</sup> But, prior HIV infection impairs protective immune response to *Plasmodium falciparum* in residents of hypoendemic areas<sup>2</sup>. Although the authors have acknowledged the same, drawing corollary from the works of Whitworth in Uganda,<sup>3</sup> this is not very well documented in their present work. In malaria endemic zones like Southeast Asia a larger population needed to be studied before any comment can be made because it is a well known fact that there might be decreased clearance of parasites from the blood in patients of HIV.<sup>4</sup>

The authors have made some contradicting comments in their discussion. At one instance they have stated that the co-infection of malaria and HIV was “not statistically significant ( $p < 0.5$ )” in their research, but then later on in their discussion they have suggested that “a small correlation does exist between the two”. As such it does become a bit ambiguous for the readers in trying to decide which of the two statements to believe.

The correlation of sexually transmitted diseases including syphilis with HIV is very well known, and this forms the backbone of many ongoing community-based programmes. However, in their article only 2 patients are found to have both HIV and syphilis (<1% of study population) and this the authors have acknowledged by saying that they did not find any definite statistically significant correlation in their study population. Moreover, they have not discussed any definite reasons as to why this disparity has occurred in their study group. In this respect, it might have been better if the authors had qualified the age-group, sexual practices, literacy and occupation and other characteristics of their study population (which I have already mentioned), because sexually transmitted infections most clearly reflect trends in risky sexual behaviors.<sup>5</sup> Moreover, syphilis is particularly associated with sexual HIV transmission and is also known to facilitates it.<sup>5,6</sup>

Besides, the authors have taken RPR as their marker for syphilis, which is neither very sensitive nor specific. What is even more controversial is that it is a known fact that malaria itself might be a cause of false positive RPR. As such, it really interests me to know why they choose such a vague marker in their line of research rather than one of the many definite markers like TPHA or FTA-abs. As they had taken ELISA for malaria and HIV as their standard, would it not have been

appropriate if they had also chosen a specific immunoassay testing for syphilis as their standard too?

Moreover, the authors have discussed the relationship of malaria and HIV very well in their article but they have somehow lost their way about the portion relating to syphilis. Hence, I believe that it would have been better if they had kept their research limited to HIV and malaria rather than diversifying it with the addition of syphilis.

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## CHALLENGE OF QUALITY CONTROL OF SPUTUM SMEAR MICROSCOPY

Dear editor,

I have gone through the editorial “Quality control of sputum for AFB examination in Big Hospitals and private laboratories”.<sup>1</sup> In the editorial, it has rightly been raised the burning issue of diagnosis of Tuberculosis by sputum microscopy and quality assurance of AFB microscopy in Big Hospitals and private laboratories of urban areas. Smear microscopy is that most practical way to positively identify

the infectious form of TB in adult. Sputum smear positive and sputum smear negative by direct smear cases behave as two types of the same disease differing in pathogenetic, prognostic and epidemiological respect. So in Tuberculosis control, the first priority is given to patients positive by direct smear microscopy and why this category of patient is the principal target of case- finding efforts.<sup>2</sup> Yet diagnosing pulmonary TB is a routine task that requires only skilled laboratory technician, a microscope and sputum samples from the patient that will be examined for the presence of TB Bacilli. Sputum smear microscopy is a corner stone in the DOTS strategy that sets treatment in motion and there by breaks the chain of infection.<sup>3</sup> The most reliable way of making the diagnosis is to find TB in a direct smear of the sputum.<sup>4</sup> So the issue of quality control of sputum smear examination should be prime concern of National Tuberculosis Center (NTC), Managers of hospitals and private laboratories. Because false negative result delays diagnosis and treatment of patient which harms for both patient and community as well. The false positive result is troublesome for the patient to be on medication for long time and masks the real diagnosis which might be after all proved fatal. So it is utmost important to enforce a quality control system to all laboratories irrespective of private or public sector.

NTP policy has included the quality control of sputum microscopy as routine work of DOTS program. Now in peripheral health institutions like PHCs and District Hospitals sputum examination is done free of cost and they are maintaining quality of work by regular participating and

sending slides for quality control of their work. But most of the private laboratories and big hospitals in urban areas do not send their slides for quality control. This indicates enforcement is concentrated only in peripheral health intuitions. And I also agree with this editorial that "Currently if is not surprising that sputum AFB examination done freely in health post may be more reliable than expensive sputum examination done in private laboratories or Big Hospitals in urban areas". So National Tuberculosis center should take initiation to cover these "dark areas under the lamp" and include them in real sense under quality control mechanism. Otherwise credibility of sputum examination among clinicians will be loosed and this will hamper for one of the major component of DOTS strategy that is "diagnosis by sputum microscopy".

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