Cryptococcal meningitis (CM) is indeed a debilitating and an opportunistic infection with high mortality in PLHIV. The mortality due to CM ranges from 13% to 44% in resource limited countries including India.1 One of the main reasons for this high mortality has been the delay in diagnosis of CM, a large number of patients present late with severe clinical features who could have been detected early if rapid and sensitive tests were used to detect it. Antifungal treatment which has high toxicity and financial constraints to safer options, with high antifungal resistance and complications due to raised intracranial tension are other factors which lead to greater mortality in these patients.

Detection of Cryptococcal antigen (CrAg) in serum or CSF has shown to have predictive value for future Cryptococcal meningitis thus it has an important significance in management of PLHIV.2 CrAg is detectable at least about 3 weeks (median) before the onset of symptoms of CM thus its detection and treatment of patients positive for the same is an important area which could lead to reduction in mortality of PLHIV.3 Existing prevalence data for CrAg antigenemia are mostly from resource-limited settings and range from as low as 2% in northern Vietnam to 21% in Benin City, Nigeria. On the basis of this data WHO in 2011 recommended that countries with a prevalence of CrAg of more than 3% in their population should consider routine screening and treatment for cryptococcal antigenemia even before ART initiation for ART-naïve adults with a CD4 T-cell count <100 cells/µL. This recommendation currently is followed only in South Africa, Rwanda and Mozambique.

Cost effectiveness of this test is also a factor which needs to be assessed. A study from Uganda by Meya et al,4 concluded that the benefits of screening exceeded the costs. Such studies are warranted in India as well to be able to support or refute the recommendations. Morbidity and Mortality outcomes of treating the asymptomatic patients who are positive for CrAg with antifungal therapy also should be studied so as to provide robust strength to the screening recommendations. Internationally very few studies are available who have reported the outcome statistics of treating these asymptomatic patients.5

With above caveats in mind the study conducted by Indian group from New Delhi in the current issue provides limited information although it is still significant because of paucity of local information in the published domain. The prevalence of CrAg positivity of 3% in their local cohort puts it into high prevalence group. The absence of development of CM over the 6 month follow up in all of their patients is also an observation which needs consideration, although the numbers are small to give any significance to it. The all cause mortality of CrAg positive patients in the study published in current issue was significantly high as reported by them, this fact needs to be further explored to determine the etiology of the patients who died so as to comment on the benefits vs hazards of antifungal therapy.

The investigators have stated that their study was not planned to determine the cost effectiveness of CrAg testing along with use of antifungal therapy but they do state that with respect to the current cost of this test vis a vis the cost of indoor management of patient of Cryptococcal meningitis in Indian scenario the test does seem to be cost effective.
cheaper and they recommend its usage for Indian HIV patients. It is warranted to have more data on the above context and that too from various cohorts so as to conclude on the same.

The current study indeed adds information about the prevalence of CrAg positivity and keeping in mind the evidence from other resource limited setting this screening test indeed seems promising, but it is prudent that WHO guidelines which are currently followed in India by NACO should be followed till further robust data comes up to support the benefits of screening all patients of HIV for CrAg and treating all positive patients. Although we do need more evidence from India to support or refute the international guidelines.

References


