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Demonstration of Multiple Drug Uses in Tuberculous Hydrocephalus

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Introduction

An infection called tuberculous meningitis has a high mortality rate. More than a third of patients who receive treatment either pass away or experience severe neurological repercussions including quadriparesis or hemiparesis. Patients who receive no treatment eventually go into a comatose state and die. The infection may cause a brain abscess, vasculitis, hydrocephalus, and other harmful effects. The probability of bad outcomes for people of all ages increases with the severity of the issues. Prompt diagnosis is the single most important thing a doctor can do to increase a patient's chances of complete recovery [1].

Description

However, even in well-equipped facilities, diagnosis is challenging: The symptoms and signs are frequently hazy at the time of presentation, and they may be mistaken for those of other meningoencephalitides. A CSF examination is required if a positive diagnosis is made [2]. Due to the low concentration, it may be challenging to detect bacilli in the CSF. There may be a lack of discriminant findings and available sensitivity, particularly in areas where tuberculosis and HIV infection are common, when compared to other diagnostic methods like CT and MRI, chest radiography, and history. WHO guidelines recommend that patients with suspected tuberculous meningitis begin empiric medication as soon as possible [3] because delays in treatment can be fatal. Patients are frequently given antibiotic regimens that were developed decades ago, not for CNS disease but for lung disease. These therapies lack optimal pharmacological features, such as adequate brain penetration, in order to end the infection and prevent antibiotic resistance. Patients with multi-drug-resistant tuberculosis and HIV who also have high mortality rates face extremely challenging management. In the latter cohort, the majority of people die within the first few weeks of being diagnosed. Typically, drug susceptibility tests are available prior to culture-based treatment findings [4].

The Stop TB Partnership has correctly prioritized the installation of quick diagnostic tests in order to achieve its goal of halving the number of deaths by compared to. However, in order to eradicate tuberculous meningitis, more sensitive diagnostic tests are required, and their performance should be improved not only in CSF but also in blood samples, which are typically used for tuberculosis diagnosis. Rapid testing of CSF samples for antibiotic resistance is required. Integrating the results of these microbiological and molecular tests with those from clinical evaluations and neuroimaging into simple diagnostic algorithms ought to be the objective. Criterion for clinical research with the intention of making it easier to compare different settings. Based on clinical evidence, radiological findings, CSF analyses, and presentation, the criteria classify tuberculous meningitis into three categories: certain, likely, and possible. We can only move forward by funding neurological research in these areas. Will the medium-term objective of halving mortality set by the Stop TB Partnership [5].

Conclusion

Since the first consensus diagnostic was recently defined by an international committee of experts, this achievement merits future recognition. A terrible but rare symptom of tuberculosis, Mycobacterium tuberculosis-induced central nervous system disease was once universally fatal without anti-TB treatment. About half of all cases of tuberculosis involve CNS tuberculosis, which has a high mortality rate and neurological morbidity and disproportionately affects children and HIV-positive individuals. Due to its rarity and variety of symptoms, central nervous system tuberculosis remains challenging to diagnose. The development of practical and effective methods for the detection and treatment of CNS tuberculosis faces additional challenges due to the fact that the disease is most prevalent in resource-poor regions of the world.

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Conflict of Interest

None.

References

1. Singh, Prabhat, Vimal K. Paliwal, Zafar Neyaz and Arun K. Srivastava, et al. "Clinical and magnetic resonance imaging characteristics of tubercular ventriculitis: An under-recognized complication of tubercular meningitis." *J Neurol Sci*342 (2014): 137-140.
2. Garg, R.K. "Tuberculous meningitis." *Act Neurol Scandi* 122 (2010): 75-90.
3. Schoeman, Johan F., and P.R. Donald. "Tuberculous meningitis." *H Clini Neurol* 112 (2013): 1135-1138.
4. Schaller, Martin Alexander, Felix Wicke, Christian Foerch and Stefan Weidauer. "Central nervous system tuberculosis." *Clini Neuroradiol* 29 (2019): 3-18.
5. Akkerman, Onno W., Omar F.F. Odish, Mathieu S. Bolhuis and Wiel C.M. De Lange, et al. "Pharmacokinetics of bedaquiline in cerebrospinal fluid and serum in multidrug-resistant tuberculous meningitis." *Clini Infe Dis* 62 (2016): 523-524.

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