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Review Article

**BRAIN TUBERCULOMA A REVIEW**Fateme Parooei <sup>1</sup>, Mahmood Anbari <sup>2</sup>, Morteza Salarzaei <sup>1\*</sup>

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**Abstract:**

**Introduction:** One of the most serious forms of meningitis is caused by *Mycobacterium tuberculosis*, which affects the lining of the meninges covering the brain and the spinal cord and is usually associated with high mortality and morbidity. One of the most serious complications of meningitis is intracranial tuberculoma.

**Methods:** In this review article, the databases Medline, Cochrane, Science Direct, and Google Scholar were thoroughly searched to identify the studies Brain tuberculoma. In this review, the papers published until early January 2017 that was conducted to study the Brain tuberculoma were selected.

**Findings :** In most developed countries, resources, budgets, high standards of living and extensive pharmacotherapy have reduced tuberculosis in the past 40 years, and there is currently little problem with this disease; however, in developing countries, the disease is still a big problem.

**Conclusion:** All patients with chronic meningitis should consider the possibility and risk of meningitis tuberculosis, and both central nervous system and eyes should be examined in order to guarantee the safety of these two organs.

**Keywords:** Brain, tuberculoma

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**INTRODUCTION:**

One of the most serious forms of meningitis is caused by *Mycobacterium tuberculosis*, which affects the lining of the meninges covering the brain and the spinal cord and is usually associated with high mortality and morbidity [1]. One of the most serious complications of meningitis is intracranial tuberculoma. MTB meningitis is a mysterious form of meningitis characterized by headache, mild fever, neck stiffness, and cerebral palsy [2]. Acute meningoencephalitis is identified with coma, increased intracranial pressure, seizure, and focal neurological defects [3]. TB meningitis is caused by the tear of sub-tubercles Epidermal into the subarachnoid space and, less likely, by hematogenous. The most common manifestations of MTB meningitis include: Kuma, the onset of a disease for more than 5 days, lymphocytic congestion in the patient's CSF sample, CSF fluid glucose size less than 50% of concurrent blood glucose, CT scan findings, and Abnormal MRI, abnormal ophthalmic fundus and proven tougher tuberculosis; factors associated with poor prognosis include: the age of the patient under 2 years of age, decreased consciousness at admission, seizure, and cerebrospinal fluid protein above 70 mg Per deciliter [4].

**METHODS:**

In this review article, the databases Medline, Cochrane, Science Direct, and Google Scholar were thoroughly searched to identify the studies Brain tuberculoma. In this review, the papers published until early January 2017 that were conducted to study the Brain tuberculoma were selected.

**FINDINGS:**

In most developed countries, resources, budgets, high standards of living and extensive pharmacotherapy have reduced tuberculosis in the past 40 years, and there is currently little problem with this disease; however, in developing countries, the disease is still a big problem. In spite of population growth, the incidence of tuberculosis has declined slightly, but the incidence rate of tuberculosis in the world is likely to be more in comparison to the past 20 years [5]. Sometimes, tuberculosis emerges as a localized development of the lining of the brain, meninges, or stratum cortex. This form of meningitis is similar to the mass of the brain. Clinical manifestations are different depending on the venereal location. With increase in size and severity, the effect of tuberculoma gets closer and closer to brain mass [6]. Nerves get involved and the patient gradually is afflicted with increasing weakness and lethargy. Timely diagnosis and the removal of further complications, accurate evaluation of symptom, and findings of

the cerebrospinal fluid are alternatives to hinder the disease from further advancement [7].

**DISCUSSION AND CONCLUSION:**

Due to the high prevalence of tuberculosis in our country, the need for tuberculosis testing seems to be of paramount importance [8]. In a systematic review, tuberculoma turned out to account for 20-30% of spatial scarring and 41% of the intracranial masses in the early childhood in India [9]. In a study in Kuwait, 1.4 percent of intracranial space spasm turned out to be associated with tuberculosis [10]. Tuberculoma can occur along with tuberculosis in other organs and parts of the body, the most common focal point of which is meningitis and contiguous and pulmonary tuberculosis have been reported in later stages [11]. There has also been a case of brain tuberculosis in Korea, even after the treatment of the pulmonary type. The need for more precision in the diagnosis of tuberculosis, even with normal chest photograph, is mandatory [12]. All patients with chronic meningitis should consider the possibility and risk of meningitis tuberculosis, and both central nervous system and eyes should be examined in order to guarantee the safety of these two organs.

**REFERENCES:**

- 1.Santy K, Nan P, Chantana Y, Laurent D, Nadal D, Richner B. The diagnosis of brain tuberculoma by 1H-magnetic resonance spectroscopy. *European journal of pediatrics*. 2011 Mar 1;170[3]:379-87.
- 2.Lee CH, Lui CC, Liu JW. Immune reconstitution syndrome in a patient with AIDS with paradoxically deteriorating brain tuberculoma. *AIDS patient care and STDs*. 2007 Apr 1;21[4]:234-9.
- 3.Saxena S, Prakash M, Kumar S, Gupta RK. Comparative evaluation of magnetization transfer contrast and fluid attenuated inversion recovery sequences in brain tuberculoma. *Clinical radiology*. 2005 Jul 31;60[7]:787-93.
- 4.Álvarez-Salgado JA, Ruiz-Ginés JA, Fuentes-Ventura CD, Gonzales-Sejas AG, Belinchón DD, González-Llanos FD, Rodríguez DL. Intracranial tuberculoma simulating a malignant tumor: case report and literature review. *Neurocirugia [Asturias, Spain]*. 2011 Dec;22[6]:600-4.
- 5.Behzadmehr R, Keikhaie KR, Pour NS. The Study of Pregnant Women's Attitude toward Using Ultrasound in Pregnancy and its Diagnostic Value based on the Demographic Features in Amir-al-Momenin Hospital of Zabol. *Int J Adv Res Biol Sci*. 2017;4[6]:58-63.
- 6.Poureisa M, Behzadmehr R, Daghighi MH, Akhoondzadeh L, Fouladi DF. Orientation of the facet joints in degenerative rotatory lumbar scoliosis: an MR study on 52 patients. *Acta neurochirurgica*. 2016 Mar 1;158[3]:473-9.

7. Daghighi MH, Poureisa M, Safarpour M, Behzadmehr R, Fouladi DF, Meshkini A, Varshochi M, Kiani Nazarlou A. Diffusion-weighted magnetic resonance imaging in differentiating acute infectious spondylitis from degenerative Modic type 1 change; the role of b-value, apparent diffusion coefficient, claw sign and amorphous increased signal. *The British journal of radiology*. 2016 Aug 11;89[1066]:20150152.
8. Nemati M, Hajalioghli P, Jahed S, Behzadmehr R, Rafeey M, Fouladi DF. Normal Values of Spleen Length and Volume: An Ultrasonographic Study in Children. *Ultrasound in medicine & biology*. 2016 Aug 31;42[8]:1771-8.
9. Kahkhaie KR, Keikhaie KR, Vahed AS, Shirazi M, Amjadi N. Randomized comparison of nylon versus absorbing polyglactin 910 for fascial closure in caesarean section. *Iranian Red Crescent Medical Journal*. 2014 Apr;16[4].
10. Kahkhaie KR, Keikha F, Keikhaie KR, Abdollahimohammad A, Salehin S. Perinatal Outcome After Diagnosis of Oligohydramnios at Term. *Iranian Red Crescent Medical Journal*. 2014 May;16[5].
11. Shahraki Z, Keikhaie KR, Amjadi N, Bonjar ZH, ahantigh H, Doosti F, Shirazi M. Correlation of 4 Hour Urine Samples with 24-Hour Urine Samples for the Diagnosis of Preeclampsia. *Journal of Obstetrics, Gynecology and Cancer Research*. 2017[In Press].
12. Mahmoodi Z, rezaie Keikhaie K, Salarzaei M. The relationship between main cardiac risk factors and acute myocardial infraction in the patients referring to Zabol Amir Al-Momenin Hospital in 2016. *Int. J. Adv. Res. Biol. Sci*. 2017;4[8]:36-9.