

**PRESENCE OF HIGH SERUM PROCALCITONIN
AND CSF LACTATE AS A NEW METHOD FOR
DIAGNOSIS OF MENINGITIS AND COMPARING
IT TO CEREBROSPINAL FLUID ANALYSIS AND
ITS IMPACT ON PROGNOSIS**

Thesis

**Submitted for Partial Fulfillment
of Master Degree in Critical Care**

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2018

Abstract

Although meningitis is a notifiable disease in many countries, the exact incidence rate is unknown. ⁽³⁾ Bacterial meningitis occurs in about 3 people per 100,000 annually in Western countries. Population wide studies have shown that viral meningitis is more common, at 10.9 per 100,000, and occurs more often in the summer. In Brazil, the rate of bacterial meningitis is higher, at 45.8 per 100,000 annually. ⁽⁴⁾

Suspected bacterial meningitis is a medical emergency; thus, immediate steps must be taken to establish the specific diagnosis and empirical antimicrobial treatment must be started rapidly. ^(5, 6) It is a major cause of morbidity and mortality among children and elderly. ^(5, 7) The mortality of untreated bacterial meningitis approaches 100% and even with optimum treatment mortality and morbidity might happen. ^(6, 8, 9) In Egypt the case fatality rate ranged from 8.5 to 55%. ⁽⁷⁾

Meningitis is typically caused by an infection with microorganisms. Most infections are due to viruses, ⁽⁴⁾ with bacteria, fungi, and protozoa being the next most common agents. ⁽¹⁰⁾ It may also result from various non- infectious causes. ⁽¹⁰⁾ The term aseptic meningitis (AM) refers loosely to all cases of meningitis in which no bacterial infection can be demonstrated. This is usually due to viruses including enteroviruses, herpes simplex virus

Key words: HIGH SERUM PROCALCITONIN AND CSF LACTATE