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Faculty of Medicine

Prevalence Of Meningitis In Sohag And Assiut Fever Hospitals In The Last Six Years

Thesis

Submitted For Partial Fulfillment Of Master Degree In Internal Medicine

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2014

Acknowledgement

Thanks to our Mericeful God for the various and numerous blessings he has bestowed on me.

I would like express my deepest thanks , and extreme sincere gratitude to my kind teacher

Dr.All Hoseiny Mohammad Mahmoud

Assistant professor of internal medicine ,Faculty of Medicine ,Al Azhar university –Assiut branch ,for his continous encouragement with kind guidance through the whole work .He really helped me by his precious opinions &contribtive of his work.

With all my deepest &most sincere feelings I would like to acknowledge.

Dr.Eglal Mohammed Mohammed kenawy

Lecture of internal medicine ,Faculty of Medicine ,Al Azhar University –Assiut branch ,for her tremendous effort ,and patience in order to carry out this work ,she was the hidden hand that support me .

Nabila khalaf Ali

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List of Abbreviations

ABM =Acute bacterial meningitis.

-Arachnoid =Arachnoid matter.

-CDC= Center for disease control and prevention.

-CFR= Case fatality rate.

-CMV =Cytomegalo virus.

-DCL=Disturbed conscious level.

-E.coli =Escheria coli.

-EMP =Ethambutol.

-EPV =Epstein barr virus.

-G –ve =Gram negative organism.

-H.influeza =Haemophilus influenza.

-HHV6 =Human herpes virus 6.

-HHV7=Human herpes virus 7.

-Hib =Haemophilus influenza type b.

-HIV = Human immune deficency virus.

-HSV =Herpes simplex virus.

-INH =Isoniazid.

-LOS= lipooligosaccharide.

-MCV4=Meningococcal conjugate vaccine 4.

-MMR =Measles mumpsrubellavirus.

-MPSV4 =Meningococcal polysaccharide vaccine 4.

-N.meningitides = Neisseria meningitides.

-NSAIDS =None steriodal anti inflammatory drugs.

-PCV =Pneumoococcal conjugate vaccine .

-Pia = Pia matter.

-PPSV =Pneumococcal polysaccharide vaccine .

-PRP =The polyribosyl ribitol phosphate

-PZA =pyrazinamide .

-RIF=Rifampicine .

-S.pneumonia = Streptococcus pneumonia.

-SM =Stretomycin.

-St.pneumonia = Streptococcus pneumonia.

-TAA= Trimeric Autotransporter Adhesions .

-TBM =Tuberclous meningitis .

-TNFα = Tumor necrosis factor α.

-US =United Status .

-Varicella=Varicella zoster virus.

-WBC=White blood cell.

Introduction

Introduction

Meningities In Egypt

Meniningitis is an inflammation of the membranes and cerebrospinal fluid (CSF) that encases the brain and spinal cord. Meningitis is a serious disease that includes several types. These include bacterial meningitis, acute bacterial meningitis, viral meningitis, aseptic meningitis and chronic meningitis**(Sáez And McCracken .,2003).**

Meningitis is a serious disease that can be life-threatening and result in permanent complications, such as coma, shock, and death. Acute meningitis caused by a bacteria is called acute bacterial meningitis and develops very quickly in a matter of hours or days. Acute bacterial meningitis is generally the most serious type of meningitis. One serious form of acute bacterial meningitis is caused by the bacterium Neisseria meningitidis, which causes a type of acute meningitis called meningococcal disease. In contrast chronic meningitis takes weeks or months to develop and can be the result of side effects of certain drugs, such a chemotherapy, a viral infection or a bacterial infection as well. (**Ginsberg ,2004**).

Viral meningitis is caused by a virus and can be acute or chronic. Aseptic meningitis is often caused by a viral infection, but can also be cause by a bacterial infection, certain drugs, or reactions to a vaccine.(**Tunkelet al .,2004**).

The early symptoms of meningitis may include fever, headache, body aches, fatigue & sleepiness. Later symptoms that may occur are nausea, vomiting, confusion, stiff neck, and sensitivity to light. In babies, the symptoms include fever, fussiness, refusal to eat, difficulty waking up, and swelling of the soft spot on the baby's head(**Van deBeeket al ., 2006**).

CSF evaluation is the single most important aspect of the laboratory diagnosis of meningitis. Analysis of the CSF abnormalities produced by bacterial, mycobacterial, and fungal infections may greatly facilitate diagnosis and direct initial therapy. Basic studies of CSF that should be performed in all patients with meningitis include measurement of

pressure, cell count and white cell differential; determination of glucose and protein level(**Van deBeeket al ., 2004).**

Untreated, bacterial meningitis is almost always fatal. Viral meningitis, in contrast, tends to resolve spontaneously and is rarely fatal. With treatment, mortality risk of death from bacterial meningitis depends on the age of the person and the underlying cause. Of newborns, 20–30% may die from an episode of bacterial meningitis. This risk is much lower in older children, whose mortality is about 2%, but rises again to about 19–37% in adults. Risk of death is predicted by various factors apart from age, such as the pathogen and the time it takes for the pathogen to be cleared from the cerebrospinal fluid, the severity of the generalized illness, a decreased level of consciousness or an abnormally low count of white blood cells in the CSF.(**Attia et al ., 1999).**

Meningitis caused by H. influenzae and meningococci has a better prognosis than cases caused by group B streptococci, coliforms and S. pneumonia. In adults, too, meningococcal meningitis has a lower mortality (3–7%) than pneumococcal disease(**Theilen et al .,2008).**

In children there are several potential disabilities which may result from damage to the nervous system, including sensorineural hearing loss, epilepsy, learning and behavioral difficulties, as well as decreased intelligence. These occur in about 15% of survivors. Some of the hearing loss may be reversible. In adults, 66% of all cases emerge without disability. The main problems are deafness (in 14%) and cognitive impairment (in 10%). **(World Health Organization WHO, 2002.).**

Meningities is potentially life –threatening and has high mortality rate if untreated; delay in treatment has been associated with a poorer outcome. Thus, treatment with wide-spectrum antibiotics should not be delayed while confirmatory tests are being conducted. If meningococcal disease is suspected in primary care, guidelines recommend that benzylpenicillin to be administered before transfer to hospital. Intravenous fluids should be administered if hypotension or shock are present. Given that meningitis can cause a number of early severe complications, regular medical review is recommended to identify these complications early and to admit the person to an intensive care unit if necessary(**Thomas et al.,2000).**

AIM OF THE WORK

Aim of the work is to review cases of meningitis admitted to Sohag and Assiut fever hospitals in the last six years from(1-1-2007 to 31-12-2012).

The study will include age and sex of the patients , residence of patients whether urban or rural areas ,educational state ,marital status of patients the presenting symptoms and predominant signs,possible investigatios and outcome of the patients.