Severe Central Nervous System Dysfunction After Influenza Virus Infection in Paediatric Patients

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Influenza virus can cause common respiratory tract infections and rarely multiorgan system disorders, resulting in mild infection, severe respiratory disease or systemic disease and complications. CNS dysfunction, an important complication of influenza infection includes IAE, a rapid progressive encephalopathy that usually presents in the early phase of influenza infection. Because of lack of inflammation in the CNS, IAE is always named influenza-associated acute encephalopathy, which includes acute necrotizing encephalopathy (ANE), presenting with fulminant encephalopathy and characteristic brain lesions following viral infection, which pathogenesis is not fully understood, but associated with unfavourable outcome.

We present four new cases of central nervous system dysfunction subsequent to infection with Influenza Virus. All four cases had convincing evidence of preceding Influenza disease with no evidence of viable Influenza Virus in the cerebrospinal fluid. We propose that these cases represent examples of post Influenza central nervous system dysfunction. We also present a review of the literature regarding Influenza neurologic dysfunction and speculate on the underlying pathologic mechanisms.

Acute Encephalitis Complicating Rubella: Four Case Reports

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Background Rubella encephalitis is a rare complication of rubella with an incidence that has been reported to range from 1/4000 to 1/24000.

Methods We report four pediatric cases of acute encephalitis complicating rubella during an epidemic of rubella between March 2011 and November 2011 to the Fattouma Bourguiba Hospital.

Results Three males and one female were included. The mean age was 9 years (7–12 years), rubella vaccine have been given only for two patients. Macular rash was reported in three cases. The most clinical symptoms were: headache, fever, loss of consciousness and seizures. Serum immunoglobulin (Ig) M antibodies against rubella virus were present in all cases. In all cases cerebrospinal fluid (CSF) analysis reveals lymphocytic pleocytosis, elevated protein levels and normal glucose levels and the presence of immunoglobulin M antibodies against rubella virus. Electroencephalogram (EEG) showed slow wave activity without focal or paroxysmal features in all cases and computed tomographies of the brain (CT) were normal. Mechanical ventilation was needed in 3. Acyclovir was administered intravenously for all patients given the initial concern of herpes simplex encephalitis. Favourable outcomes in all cases were reported.

Conclusion In Tunisia a revision of our vaccination program against rubella is needed. Benefits and the costs of a non-selective vaccination strategy including all children and all women of childbearing age must be weighted to prevent such a severe complication.

Parent’s Perceptions and Initial Management of Febrile Convulsions

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Background and Aims Febrile convulsions are the most common seizure disorder in childhood, affecting 2–5% of children between the ages of 3 and 60 months. It is a frightening and anxiety-provoking event for parent and caregivers. The initial management of this condition is often poor in rural setting in third world countries.

Aims To assess the factors affecting the initial management of children with febrile convulsions.

Methods A prospective study interviewing parents of 20 children with febrile convulsions admitted to a hospital in Dhaka, Bangladesh.

Results 19 mothers and 2 fathers of children with febrile convulsions were interviewed. Only 1 parent knew what a febrile convulsion was. 50% initially managed their children by massaging oil onto the back. 60% of the children were seen by a local religious healer. 90% of parents believed their child was possessed by an evil spirit. 50% thought their children will die. 60% of the parents had been educated up to only primary school level. 90% reported their local hospital to be 10 miles away.

Conclusions The education level, religious beliefs and location of nearest hospital significantly affected the way parents initially manage their children with febrile convulsions. It is important in third world countries that media methods such as television, radio and newspapers are used to discuss management of common conditions to avoid inappropriate treatments by parents. Leaflets should also be made available to collect from local shops and family physicians.
Background The diagnose of DSD is a challenge for medical staff, family and society.

Material and method We study 15 patients with DSD, between 2005–2011. The study protocol included anamnesis, clinical examination: auxiological dates, degree of puberty ( Tanner), genitalia conformation (Prader stages) and its consistency with social sex. Laboratory datas: karyotype, gonadotrophins, testosterone, DHT, inhibin B, DHEA and DHEAS, 17OH progesterone; SRY gene (in selected cases) was performed. In all the cases we perform psychological exams of the child and family.

Results We have eight, 46 XX, and three 46 XY subjects. According to age we have 4 groups: newborns (2), children between 1–3 years(4), between 3–6 years (6) and more than 10 years(2). The results are divided into 4 groups: newborns (2), children between 1–3 years(4), between 3–6 years (6) and more than 10 years(2).

Results The mean gestational age of the study group was 30.5 ± 2.4 (23.9–33.9) weeks, the mean birth weight was 1339 ± 496 (496–3190) g, mean birth length was 49.6 ± 2.7 (43–56) cm, mean birth pO2 107mmHg, HCO3 12.1mmol/l. He had a preceding fortnight before admission and laboratory exams.

Conclusions Genetic testing for NDM can identify PNDM in newborns helping the physician to select the most appropriate therapy. However, 40% of cases are currently without a molecular genetic diagnosis.