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INCIDENCE OF DENGUE FEVERS INA TERTIARY CARE HOSPITAL&IN ITS OUTCOME

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ABSTRACT

Dengue is the most rapidly spreading aedes mosquito borne viral disease in the world. In the last 50 years incidence has increased 30-fold with increasing geographic expansion to new countries. The dengue virus is transmitted by a bite from the *Aedes aegypti* mosquito. Only the female mosquito transmits the dengue virus. This mosquito is a daytime biter, both inside and outside homes, and is most active in the hours after sunrise and before sunset. Transmission of dengue is now life threatening in every region of the world and more than 125 countries are known to be dengue endemic. Dengue inflicts a significant health, economic and social burden on the populations of endemic areas. Dengue hemorrhagic fever and dengue shock syndrome (DSS) are major causes of childhood morbidity and mortality in many tropical countries. Increased intravascular permeability leading to shock is the cardinal feature of DSS. Fluid resuscitation to counteract massive plasma leakage is the mainstay of treatment. A retrospective study was done on dengue and its outcome in Rajivgandhi institute of medical science (Rims), kadapa Under The Guidance Of Dr. SureswaraReddy Md(Gen), Dept Of General Medicine. The main criteria of this study was to measure the incidence rate of dengue & its outcome in kadapa region.

KEYWORDS: Dengue fever**,** Incidence.

METHODOLOGY

MATERIALS & METHODS

Dengue test, (NS1 antigen test kit, IGg,IGm) CBP, BGT.

Place of study

Rajiv Gandhi institute of medical science(RIMS) Kadapa (AP).

Inclusion criteria

All male and female patients with dengue positive Case.

Exclusion criteria

Other viral fevers (typhoid,malaria) were excluded in this study.

Procedure

A retrospective observational study which is involved 200 patients. On admission of a patient to the study, the history and clinical examination findings were recorded on a standard form and venous blood was taken to determine the hematocrit and full blood cell count and for serological and biochemistry tests collected all the patient data through medical records ,patient interviews.clinically diagnosed dengue positive cases were taken (i.e ns1 antigen, igg, igm, antibodies) and provided symptomatic therapy like i.v fluids crystalloids and colloids for intravascular replacement and dehydration. An intravenous cannula was inserted and the fluid infused at a constant rate of 20 ml/kg for the first hour, followed by 10 ml/kg for the subsequent hour. Vital signs were recorded every 30 minutes until blood pressure was stabilized, Administration of crystalloid solutions (ringer's lactate or 0.9% w/v "normal" saline) to patients with plasma leakage is usually effective in restoring circulating-blood volume, but large volumes are often required. More refractory cases may require the use of colloid solutions. The administration of colloids containing molecules that escape slowly from the circulation could theoretically overcome plasma leakage more quickly and effectively, and this might be beneficial in preventing recurrence of dehydration and reducing the requirement for large volumes of intravenous fluid and thus the risk of fluid overload. to reduce fever analgesics were prescribed ,platelets are transfused to the dengue patients who are less than 10,000 platelet count and patient complaints of bleeding manifestations and plasma leakage. General measures and also supportive treatment along with oral fluids are suggested.

RESULTS

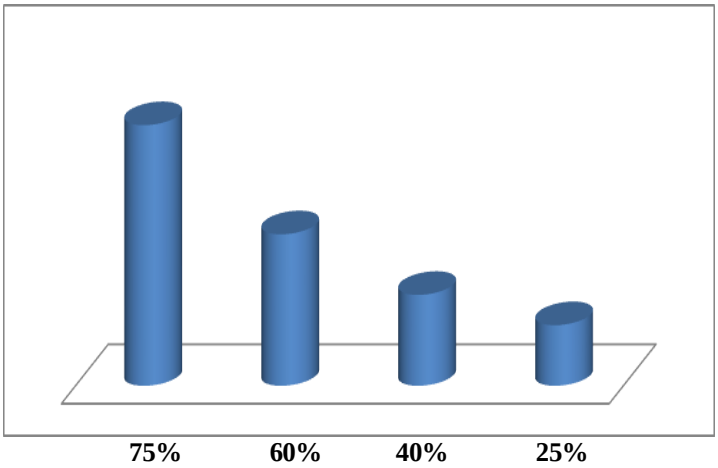
Table 1: The following results are described below

S.No	Nr of cases	
1	Number of cases collected	200
2	Nr of Dengue positive cases	150
3	Nr of other viral cases	50
4	Nr of severe Dengue cases	25

Table 2: Un planned urban over population of areas leading to inadequate

S.no	No of treated patients	Percentage
1	No of male patients with dengue fever	70(40%)
2	No of female patients with dengue fever	80(60%)
3	No.of patients treated with oral fluids& symptomatic therapy	115(75%)
4	No.of dengue patients with platelet transfusion	35(25%)

All of these factors must be addressed to control the spread of dengue. Unplanned urbanization is believed to have had the largest impact on disease amplification in individual countries, whereas travel is believed to have had the largest impact on global spread.



No. Of Patients Treated, No. Of. Female Dengue Cases, No.Of Male Dengue Case, No.Of.Bloodtransfusion. With Oral Fluids &Symptomatic Therapy.

DISCUSSION

This study has been conducted in kadapa region in rims hospital duration of 3 months (October, November, December). Total 200 patients were participated in this study, 150 patients are diagnosed as dengue positive.male patients with dengue noted as 70, female cases are noted as 80and patients treated with symptomatic therapy, general measures and supportive treatment are 115. The loss of plasma results in hemoconcentration and a reduction in circulating-blood volume, leading to peripheral vasoconstriction and narrowing of the pulse pressure. Systemic vascular resistance is increased and the cardiac index is reduced, whereas in other systemic infections the opposite is found Patients has symptomatic therapy along with platelet transfusions are 35. female patients are more affected with dengue than male in this study. Blood pressure and pulse were measured at least every 2 hours, and hematocrit at least twice a day until recovery. WBC, platelet, and reticulocyte counts were measured both on admission and on discharge from the hospital. Possible factors for dengue fever spread include.

CONCLUSION

Dengue cases show seasonal distribuition more number of cases were noted with in 3 months .it has to be reported mostly in rural areas, due to un hygiene ,low socio economic factors ,lack of awareness about dengue Infection its clinical manifestations and safety precautions. Recovery is sometimes associated with prolonged fatigue and depression.Repeated episodes of dengue fever may result in excessive bleeding and shock but, with appropriate treatment, are rarely fatal. There are approximately five additional vaccine candidates under evaluation in clinical trials, including other live-attenuated vaccines, as well as subunit, DNA and purified inactivated vaccine candidates. Additional technological approaches, such as virus-vectored and VLP-based vaccines, are under evaluation in preclinical studies.

Most patients have tender hepatomegaly, and ascites and pleural effusions are common. In untreated patients severe hypotension may follow, which can be fatal if intravenous fluids are not given but maintainence of personal hygiene and using of mosquito mats, removing of stagnant water from surroundings, taking of healthy food should keep away the diseases. hypovolemic circulatory collapse, it has been suggested that colloids may be superior to crystalloids as replacement fluids, causing less fluid overload and pulmonary edema. Advances in molecular biology have had a great impact on measuring and evaluating the specific steps that control dengue virus replication; some of these techniques have led to the first descriptions of differences in dengue virus virulence. All patients made a full recovery following supportive fluid therapy alone and were discharged to home.

REFERENCES

Journal references

1. Halstead SB. Dengue. Lancet, 2007; 370: 1644–1652. [PubMed]
2. Mathew A, Rothman AL. Understanding the contribution of cellular immunity to dengue disease pathogenesis. Immunol. Rev., 2008; 225: 300–313. [PubMed]
3. Rosen L. Emperors new clothes revisited, or reflections on pathogenesis of dengue hemorrhagic-fever.Am. J. Trop. Med. Hyg, 1977; 26: 337–343. [PubMed]
4. Gubler DJ, Reed D, Rosen L, Hitchcock JC. Epidemiologic, clinical, and virologic observations on dengue in Kingdom-of-Tonga. Am. J. Trop. Med. Hyg, 1978; 27: 581–589. [PubMed]
5. Coffey LL, Mertens E, Brehin AC, et al. Human genetic determinants of dengue virus susceptibility.Microbes Infect, 2009; 11: 143–156. [PubMed]

BOOKS

Clinical profile and outcome of dengue infection in and around .g.v rama et al ,Kurnool.2014, WHO. guide lines on dengue diagnosis ,treatment,prevention & control.2015 Wichman, odengue antibody prevalence in german travellers .1998 Gubler,et al. impact of dengue /dengue hemorrhagic fever on the developing world 2000.53,35-70. Guzman et al .epidemologic studies on dengue in Santiago de cuba, 1997.

PATENTS[1]

1 Coudeville L, Baurin N. Potential Impact Of Dengue Vaccination: Insights From The First Large-Scale Efficacy Trials. Poster Presented At 64th ASTMH Annual Meeting - October 25-29, 2015, Philadelphia, Pennsylvania, USA. Poster #3234.

Websites

[2] WHO Dengue And Severe Dengue Fact Sheet #117 Http://Www.Who.Int/Mediacentre/Factsheets/Fs117/En/ Visited 10 August 2015

[3] Ibid.

[4]http://Www.Who.Int/Csr/Disease/Dengue/Impact/En/

REFERENCES

1. Coudeville L, Baurin N. Potential Impact Of Dengue Vaccination: Insights From The First Large-Scale Efficacy Trials. Poster Presented At 64th ASTMH Annual Meeting - October 25-29, 2015, Philadelphia, Pennsylvania, USA. Poster #3234.
2. WHO Dengue And Severe Dengue Fact Sheet #117 Http://Www.Who.Int/Mediacentre/Factsheets/Fs117/En/ Visited 10 August 2015.
3. Ibid.
4. http://Www.Who.Int/Csr/Disease/Dengue/Impact/En/
5. Shepard DS, Halasa YA, Undurraga EA, Stanaway J. Global Economic Cost Of Dengue Illness. Poster Presented At: American Society Of Tropical Medicine And Hygiene Annual Meeting; Oct. 25-29, 2015, Philadelphia, PA, Poster 781
6. Egger JR, Paul G. Coleman. Age And Clinical Dengue Illness. Emerg Infect Dis., June; 2007; 13(6): 924–927.
7. San Martin JL, Brathwaite O, Zambrano B, Et Al. The Epidemiology Of Dengue In The Americas Over The Last Three Decades: A Worrisome Reality. Am J Trop Med Hyg, 2010; 82: 128-35.
8. Capeding M.R. Et.Al, Clinical Efficacy And Safety Of A Novel Tetravalent Dengue Vaccine In Healthy Children In Asia: A Phase 3, Randomised, Observer-Masked, Placebo-Controlled Trial, October, 2014; 384(9951): 11–17; 1358–1365.
9. Villar L, Dayan GH, Arredondo-Garcia JL, Rivera DM, Cunha R, Deseda C Et Al. Efficacy Of A Tetravalent Dengue Vaccine In Children In Latin America. N Engl J Med., 2015.
10. Hadinegoro, Sri Rezeki S., Et Al. Efficacy And Long-Term Safety Of A Dengue Vaccine In Regions Of Endemic Disease Integrated Analysis Of Efficacy And Interim Long-Term Safety Data For A Dengue Vaccine In Endemic Regions, July 27, 2015. DOI: 10.1056/Nejmoa1506223.
11. Halstead SB. Dengue. Lancet, 2007; 370: 1644–1652. [PubMed].
12. Mathew A, Rothman AL. Understanding the contribution of cellular immunity to dengue disease pathogenesis. Immunol. Rev., 2008; 225: 300–313. [PubMed].
13. Rosen L. Emperors new clothes revisited, or reflections on pathogenesis of dengue hemorrhagic-fever.Am. J. Trop. Med. Hyg, 1977; 26: 337–343. [PubMed].
14. Gubler DJ, Reed D, Rosen L, Hitchcock JC. Epidemiologic, clinical, and virologic observations on dengue in Kingdom-of-Tonga. Am. J. Trop. Med. Hyg, 1978; 27: 581–589. [PubMed].
15. Coffey LL, Mertens E, Brehin AC, et al. Human genetic determinants of dengue virus susceptibility.Microbes Infect, 2009; 11: 143–156. [PubMed].