



CLINICAL PROFILE AND OUTCOME OF VIRAL HEPATITIS AMONG CHILDREN IN A TERTIARY PEDIATRIC GOVERNMENT HOSPITAL IN QUEZON CITY

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Introduction

Viral hepatitis caused 1.34 million deaths in 2015, a number comparable to deaths caused by tuberculosis and higher than those caused by HIV. However, the number of deaths due to viral hepatitis is increasing over time, while mortality caused by tuberculosis and HIV is declining (WHO, 2017).

Hepatitis is the inflammation of the liver. Most cases of hepatitis in the world are secondary to infection caused by the hepatotropic viruses: Hepatitis A, B, C, D, and E. Viral hepatitis is a fairly common infection in the Philippines. Most of these cases occur among the lower socio-economic groups (Nina G. Barzaga, 1996).

Objectives

GENERAL OBJECTIVE

- To describe the clinical profile, sociodemographic profile, and outcome of Viral Hepatitis among children managed in a tertiary government hospital.

SPECIFIC OBJECTIVES

- To determine the sociodemographic profile of patients diagnosed with Viral Hepatitis in terms of: Age, Sex, Residence, Socioeconomic status
- To determine the clinical profile of patients diagnosed with Viral Hepatitis according to Common presenting signs and symptoms, Nutritional status, Etiology, Laboratory investigations and Treatment done
- To determine the outcome of patients diagnosed with Viral Hepatitis in terms of: Length of stay, Disposition upon discharge

Methodology

Design: This study utilized a descriptive cross sectional design using medical records of patients with a final diagnosis of either Hepatitis A, B, C, D or E infections.

Setting: The study was conducted at National Children's Hospital.

Participants: This study utilized total enumeration wherein all patients at NCH from January 2011 to December 2020 with a final diagnosis of either Hepatitis A, B, C, D, and E infections were included.

Main Outcome Measures: Profile and outcome were encoded and interpreted using frequencies, averages, and percentages.

Results

Thirty-five subjects were included in this study. Majority of the them belong to the 10-18 years old group (42.9%), with a male predominance of 71.4%. All patients reside in urban areas and most of them belong to the Class D category (71.4%). Common presenting signs and symptoms were abdominal pain, fever, and jaundice. Most of them had normal nutritional status (62.9%).

Hepatitis A Virus was the most common etiology affecting 33 out of 35 patients, while Hepatitis B Virus was found in 2 patients. This is consistent with the serology results which revealed 94.3% of patients were reactive for Anti-HAV IgM and 5.7% were reactive for Anti-HBc \pm HBsAg.

Majority of the patients had ALT (35.3%) and AST (64.7%) levels <500 U/L, and 50% of them had Bilirubin levels 5-10 mg/dL. Hypoalbuminemia was noted in 8 out of 17 patients while deranged PT and INR were seen in only 2 and 1 out of 13 patients, respectively. ALP was elevated only in 7 out of 25 patients, and the mean CBC results were within normal limits. Most of the patients received supportive treatment alone (68.6%) and the mean duration of hospital stay was 6.9 ± 8.62 days. All of the patients were discharged improved.

TABLES

SIGNS AND SYMPTOMS	N (%)
Abdominal Pain	33 (94.3%)
Fever	30 (85.7%)
Jaundice	29 (82.9%)
Vomiting	22 (62.9%)
Dark Urine	16 (45.7%)
Anorexia	12 (34.3%)
Loose Stooling	4 (11.4%)
Nausea	2 (5.7%)
Altered Sensorium	1 (2.9%)
OTHERS:	
Melena	1 (2.9%)
Change in Behavior	1 (2.9%)
Edema	1 (2.9%)
Pallor	1 (2.9%)

Signs and Symptoms Presented by Patients in a Tertiary Pediatric Government Hospital in Quezon City From 2011 to 2020

PARAMETERS	N (%)
ALT (U/L)	
Normal	1 (2.9%)
<500	12 (35.3%)
500-1000	11 (32.4%)
>1000	10 (29.4%)
AST (U/L)	
Normal	2 (5.9%)
<500	22 (64.7%)
500-1000	3 (8.8%)
>1000	7 (20.6%)
PT	
>15 secs	2 (15.4%)
Normal	11 (84.6%)
INR	
>1.5 secs	1 (7.7%)
Normal	12 (92.3%)
Albumin (gm/dL)	
<3.5	8 (47.1%)
Normal	9 (52.9%)
Bilirubin (mg/dL)	
<5	6 (25.0%)
5-10	12 (50%)
>10	6 (25.0%)
ALP (U/L)	
Elevated	7 (28.0%)
Normal	18 (72.0%)
Complete Blood Count	Mean \pm SD
Hgb (g%)	12.1 \pm 2.05
Hct (%)	40.0 \pm 6.00
WBC ($\times 10^3$ /cmm)	8.7 \pm 3.51
MCV (fl)	77.9 \pm 5.65
MCH (pg)	26.7 \pm 2.15
MCHC (%)	34.1 \pm 1.26
PLT ($\times 10^4$ /cmm)	378.2 \pm 146.22

Laboratory Investigations Done in Patients Diagnosed with Viral Hepatitis in a Tertiary Pediatric Government Hospital in Quezon City From 2011 to 2020

Conclusion

Hepatitis A is the most common etiology owing to its Fecal-Oral mode of transmission. Most infections manifest insidiously affecting adolescents. It is important to improve awareness and patient education among the communities regarding prevention and clinical presentation of Viral Hepatitis to decrease the incidence, morbidity, and mortality of this disease.

References

- Ong, R. G. (2015). Chronic hepatitis B virus in the Philippines. *Journal of Gastroenterology and Hepatology*.
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- To determine the clinical profile of patients

Results

Nutritional status, Etiology, Laboratory investigations and Treatment done

- To determine the outcome of patients diagnosed with Viral Hepatitis in terms of: Length of stay, Disposition upon discharge

Thirty-five subjects were included in this study. Majority of the them belong to the 10-18 years old group (42.9%), with a male predominance of 71.4%. All patients reside in urban areas and most of them belong to the Class D category (71.4%). Common presenting signs and symptoms were abdominal pain, fever, and jaundice. Most of them had normal nutritional status (62.9%).

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