

Original Article: 

A RETROSPECTIVE STUDY OF CLINICAL RABIES DEATHS IN THE INFECTIOUS DISEASE WARD OF SCB MEDICAL COLLEGE HOSPITAL, CUTTACK, ODISHA

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ABSTRACT

Objective:

1. To study the profile of rabies death cases admitted at SCBMCH
2. To suggest recommendation based on the study findings.

Methodology:

Retrospective record based study. The data was collected from the bed tickets in the record room of SCB Medical College, Cuttack over 4 calendar years i.e. 2010 to 2013 using predesigned and pretested format.

Observations :

Out of total 112 cases, only 20(18%) were females. 27(24%) were children of the age group of <14yrs and rest were >14yrs. In the above mentioned four years only 19(17%) death occurred at S.C.B. medical college & hospital and rest were LAMA. Out of the total 19 deaths that occurred at SCB Medical College Hospital, Cuttack, 2 (10.5%) patients have taken both anti-rabies vaccine and immunoglobulin, 3 (15.7%) patients have taken only vaccine, 14(73.7%) patients have not taken either vaccine or immunoglobulin. In 16 (84%) cases dog, in 2(11%) cases cat and in 1(5%) case jackal was the biting animal.

Conclusion:

Awareness must be created among the people for immediate wound management and receive full course of vaccine & immunoglobulin without delay. Sensitization workshop for the health care staff to be conducted regarding proper animal bite wound management and proper handling, storage and administration of vaccine & immunoglobulin.

Key Words : Rabies deaths; Retrospective Study.

INTRODUCTION

Although rabies is to be considered as a disease that should be controlled on priority basis unfortunately it remains a neglected disease in majority of the countries particularly Asia¹. Human mortality from endemic canine rabies are estimated to be 55000 death per year². Rabies in India has been a disease of low public health priority both in the medical and veterinary sectors³. It is rapidly progressive lyssa virus encephalitis that is 100% fatal. There is no clinically effective antiviral drug for rabies. In this study an attempt has been made study the rabies cases admitted to the Infectious disease ward of SCB Medical College & Hospital, Cuttack.

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OBJECTIVE

1. To study the profile of rabies cases admitted at SCBMCH.
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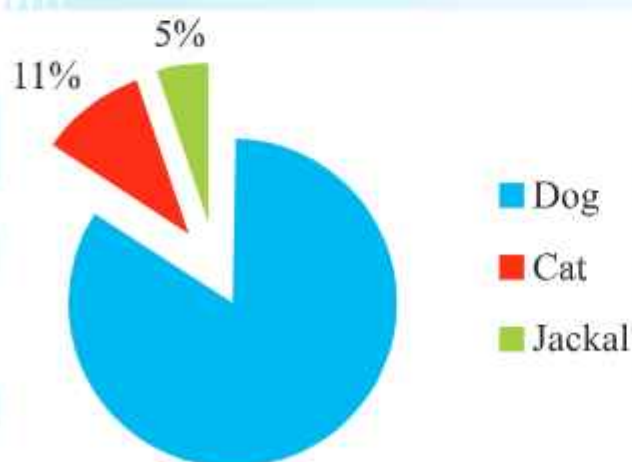
METHODOLOGY

Retrospective record based study. The data about the admitted Rabies cases was collected from the indoor register and the data of the cases who died at this hospital was collected from individual case sheet in the record room of SCB Medical College, Cuttack over 4 calendar years i.e. 2010 to 2013 using pre-designed and pretested format.

OBSERVATION AND DISCUSSIONS

According to the indoor register, there were a total of 112 cases admitted to the infectious ward of SBMCH during 4 years from 2010 to 2013. In the year 2010 there were 32 cases, 2011 had 21 cases, in the year 2012 there were 31 cases and in 2013 there were 28 cases respectively. A total of 112 rabies cases were reported in during 4 year. Among all the 112 rabies cases reported 93(83%) cases had left the hospital against medical advice and only 19 (17%) cases died in the hospital. Out of the 19 rabies cases dying in the hospital, most of them 7(36.8%) were in the age group of 45-59 followed by 6 (31.6 %) in the age group of 15-29 years, 3(15.8%) cases in the age group of 30-44 years, there were only 2(10.5%) in the age group of more than 60 years and 1 case (5.3%) in age group less than 15 years. Among all the rabies death cases in the hospital 15(78.9%) were male and 4(21.1%) were female. Most of the rabies death cases 18(94.7%) were residing in the rural area and 1(5.3%) was only residing in the urban area. In a review article by Yashwant Kumar et. al rural population contributes to about 90% of the total mortality due to rabies.⁴

Most of the rabies death cases were bitten by dog 16(84%) followed by 2(11%) cases by cat and 1(5%) by jackal. According to WHO TRS 2005 95% of the global rabies death are because of dog bite. All reported cases of rabies were cat III exposures.



Graph 1 : Distribution of rabies cases according to the biting animal

Table 1 :
Profile of Rabies death cases in the hospital (N=19)

Sl.No	Age	No.	%
1	<15 yrs	1	5.3
2	15-29 yrs	6	31.6
3	30-44 yrs	3	15.8
4	45-59 yrs	7	36.8
5	>60 yr	2	10.5
6	Total	19	100
Sex			
1	Male	15	78.9
2	Female	4	21.1
3	Total	19	100
Residence			
1	Rural	18	94.7
2	Urban	1	5.3
3	Total	19	100

Table 2 :
Time interval between animal bite and death

Sl.No	Time interval between bite and death	Number	%
1	<1 month	11	57.9
2	1-3 month	6	31.6
3	3-6 month	2	10.5
4	Total	19	100

Most of the rabies deaths i.e. 11 (57.9%) occurred in less than 1 month of the exposure, 6(31.6%) died in 1to 3 months of the bite and 2(10.55%) died between 3 to 6 month of bite.

Among all 19 rabies death cases in the hospital 14(73.7%) had not received any treatment. Only 2(10.5%) had received both vaccine and immunoglobulin. Full course of vaccination was received by 2(10.5%) cases and 1(5.3%) had partially received vaccine. Although 2(10.5%) had developed rabies after full course of vaccine & immunoglobulin the probable reason could be delay

Table 3 :
Post Exposure Prophylaxis status of Rabies death cases

Sl.No	PEP status	Number	%	
1	No treatment	14	73.7	
2	Only Vaccine	Full course vaccination	2	10.5
3	Only Vaccine	Partially vaccinated	1	5.3
4	Both vaccine and immunoglobulin	2	10.5	
5	Total	19	100	

in initiation of treatment or may be the vaccine had lost its potency due to improper route of administration or faulty vaccine reconstitution, or a possible loss of potency of the vaccines and immunoglobulins.

CONCLUSION

Rabies being a fatal disease the awareness must be created among the people for immediate wound management and receive full course of vaccine & immunoglobulin without delay. Sensitization workshop for the health care staff to be conducted regarding proper animal bite wound management and proper handling, storage and administration of vaccine & immunoglobulin. Treatment and effective management of rabies cases Counseling and protection of the close contacts should be practiced

by the staff of the Infectious disease ward especially in a tertiary level hospital. Most of the rabies cases had left the hospital against medical advice it is very necessary to give symptomatic treatment and make rabies death painless and peaceful.

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