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The Incidence Of Hepatitis B Surface Antigen Positive Pregnant Women Admitted and Delivered at Camiguin General Hospital, Mambajao, Camiguin

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ABSTRACT

This study sought to investigate the incidence of mothers who are Hepatitis B surface antigen positive at Camiguin General Hospital for the month of December 2005 and January 2006. This study sought to find out cases of pregnant women with positive hepatitis B surface antigen who delivered at Camiguin General Hospita, number of babies born from mothers who are positive of hepatitis B surface antigen, and were given immunoprophylaxis 12 hours after delivery, and the profile of the mothers who had hepatitis B surface antigen positive as to age, educational status, economic status and awareness of the result of hepatitis B surface antigen. Pregnant women admitted were checked up if they are positive of Hepatitis B surface antigen and the study reveals that out of seventy (70) pregnant mothers admitted and delivered, fifty eight (58) were examined for Hepatitis B surface antigen and twelve (12) were not examined. Three (3) of the mothers were found positive of Hepatitis B surface antigen with three (3) babies born from mothers who are positive for Hepatitis B surface antigen and were given Hepatitis B vaccine with a dose of 0.5 ml and Hepatitis B immunoglobulin with a dose of 0.5 ml at birth. The three mothers are in their early twenties, single, first time mothers, undergraduates and jobless and knew the result of the Hepatitis B surface antigen prior to delivery. The researchers concluded that there might be a bigger population of Hepatitis B surface antigen positive mothers at Camiguin Island but have not been diagnosed. Proper prenatal care to mothers shall be given to minimize cases of Hepatitis B surface antigen, and mandatory examination of Hepatitis B surface antigen to all pregnant women shall be conducted, since prenatal transmission of the disease is the mode of transmission which perpetuates the disease.

Keywords: Hepatitis B Surface Antigen, Pregnant Women

INTRODUCTION

The term viral hepatitis refers to a primary infection of the liver caused by at least five viruses: Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis D and Hepatitis E (Borkowsky, 2003). The most important risk factor for acquisition

of Hepatitis B virus in children is perinatal exposure or during delivery to a Hepatitis B surface antigen positive mother.

According to Snyder, et. al.(2003) during the neonatal period, hepatitis B antigen is present in blood of two point five percent (2.5%) of infants born to affected mothers, indicating that intrauterine infection occurred.

Hepatitis B is a disease, which affect human beings of diverse age groups. It affects the liver of the human beings and transmitted via blood and blood products, needle pricks, sexual contact and from the infected mother to her baby during delivery. Babies born to an infected mother have a 90 to 95 percent chance of contracting HBV during childbirth. If a baby is infected, the virus remains in its body for many years, silently attacking liver cells and eventually leading to cirrhosis or, in some cases, cancer of the liver. Even though an infected baby may show few or no signs of infection, the infant continues to be infectious and can pass the virus on to others (Encarta, 2003). Hepatitis B does not only affect the mother and the baby. It can be transmitted to other siblings, sexual partners and close household contacts. It is therefore very important for the above named persons to be aware of the existence of such disease and to be taught how to protect themselves from being contaminated.

However, the complications of Hepatitis B are preventable through vaccination. This vaccination has a crucial period upon which it has to be administered to be assured of its effect. The mentioned vaccines are Hepatitis B vaccine and Hepatitis B immuneglobulin. The two vaccines should be given to babies born from mothers who are positive for the Hepatitis B surface antigen within twelve hours after delivery of the baby to ensure effect. In remote areas or in islands where supply of the above mentioned vaccines is nil or none at all, it is crucial that such vaccines must be secured and be available prior to delivery of the baby. Hence prior knowledge of the result of Hepatitis B surface antigen is very important.

This study is important because it prevents the transmission of the Hepatitis B virus to the babies, if early detection is done and immunoprophylaxis is given. This protects the babies from developing hepatic carcinoma later on in life if immunoprophylaxis is done within twelve hours from birth. Another importance of this study is that awareness on the part of the sexual partners and precautionary measures can be done. Such measures are avoidance of contact with body fluids of the infected partner, use of barrier methods during sexual activity and advice on immunization to be received. Another is that once detected precautionary measures should be done by close household contacts. Such measures are avoidance of contact of body fluids and immunization of the close household contacts. This is also important for the medical and nursing personnel because prior knowledge of the Hepatitis B surface antigen status of the patient, if found out to be positive enable them to exert extra care in order to protect themselves from transmission of the virus to them. Such effort include care not to come in contact with the body fluids of the

patient, use of protective materials such as gloves and goggles and extreme care to avoid accidental needle pricks. In case accidental contamination with the body fluids occur, then immunization will be instituted immediately. This is also helpful to hospital patients because prior knowledge of the Hepatitis B surface antigen result, if positive, alerts the infection control committee of the institution to take extra precaution to prevent the transmission of the disease hospital patients. This is done by isolating the patient from the rest of the other patients and by discarding all the materials used by the patient so that such materials will not be reused not endangering the next patient in line.

STATEMENT OF THE PROBLEM

This study aimed to identify the incidence of Hepatitis B surface antigen positive pregnant women who delivered at Camiguin General Hospital, Mam bajao,Camiguin.

It sought to answer the following questions:

1. What is the profile of the mothers who had Hepatitis B surface antigen positive in terms of: age; Civil status, educational attainment; occupation; and parity?
2. How many cases of pregnant women with positive Hepatitis B surface antigen delivered at Camiguin General Hospital?
3. How many babies born from mothers who are positive for Hepatitis B surface antigen and given immunoprophylaxis twelve hours after delivery?
4. What health intervention can be done for mothers who are Hepatitis B surface antigen positive?

METHODOLOGY

This study is descriptive normative conducted at Camiguin General Hospital, Mambajao Camiguin an island province in the northern tip of Mindanao. Camiguin Island has two hospitals, one hospital is primary, located in the municipality of Catarman and another hospital is Camiguin General Hospital which is a secondary hospital run by the government with a hospital bed capacity of one hundred (100).

Convenience sampling was used to get the number of respondents of this research which is fifty eight (58) pregnant women who delivered at Camiguin General Hospital for the month of December 2005 and January 2006 and were examined for Hepatitis B surface antigen and their respective babies. Documentary analysis was utilized in this study as to result of the examination done by the physician for Hepatitis B surface antigen.

The researchers asked permission from the Chief of Hospital at Camiguin General Hospital to conduct a study on all pregnant women who

delivered at the said hospital. The researchers went to the hospital to gather the patients' charts.

The total number of pregnant mothers who delivered at Camiguin General Hospital , mothers who were examined for Hepatitis B surface antigen , mothers who were noted to be positive for Hepatitis B surface antigen , and babies who were given Hepatitis B vaccine and immuneglobulin were recorded. The profile of the mothers that were included was age, civil status, educational status, occupation, parity and the awareness of the result of Hepatitis B surface antigen. After getting all the results, the researchers gave health teaching to the respondents. Health teachings was given as an intervention done to all mothers who are Hepatitis B surface antigen positive which contains things to be done to protect the babies and future babies from being contaminated with Hepatitis B, and things to be done in order to prevent transmission of Hepatitis B to the sexual partners, close household contacts, medical personnel, nursing personnel and other in hospital patients.

RESULTS AND DISCUSSION

Problem One: *What is the profile of the mothers who had Hepatitis B surface antigen positive in terms of age, civil status, educational attainment, occupation, and parity?*

Three of the mothers who were noted to be positive of Hepatitis B surface antigen belong to the age range of twenty to thirty years old ,single , college level, unemployed and the parity of the mothers is nulligravida.

Problem Two: *How many cases of pregnant women with positive Hepatitis B surface antigen delivered at Camiguin General Hospital?*

There were a total of seventy (70) mothers who delivered at Camiguin General Hospital for the month of December 2005 to January 2006. Fifty eight (58) of these mothers were examined for Hepatitis B surface antigen, twelve (12) mothers were not examined for Hepatitis B surface antigen positive. Three of the mothers were positive of Hepatitis B surface antigen which is five point one percent (5.1%) of the population and fifty five (55) of the mothers were negative of Hepatitis B surface antigen which is ninety four point nine percent (94.9%) of the population.

Problem Three: *How many babies born from mothers who are positive for Hepatitis B surface antigen and given immunoprophylaxis twelve hours after delivery?*

There were three babies born to mothers who are Hepatitis B surface antigen positive which is five point one percent (5.1%)of the population.

According to Worman (2005), Hepatitis B virus causes acute and chronic hepatitis. About ninety percent (90%) of infected neonates will become

chronically infected. These three babies will probably develop into chronic hepatitis B infection if appropriate immunoprophylaxis will not be instituted to these babies. Though the researcher is only confronted with three babies, but the possibility that these three babies has a possibility of developing into a chronic hepatitis B infection later on in life is enormous. If such babies can be prevented from developing such complication of the illness then it is already an enormous help rendered to the family concerned and the community as well.

All of them were given Hepatitis B vaccine and Hepatitis B immuneglobulin at birth. These mothers were identified during prenatal care and were advised to purchase the medication prior to or near the delivery period. This was done to prevent the delay of administration of the medication for the reason of unavailability of the medication in the island.

Problem Four: ***What health intervention can be done for mothers who are Hepatitis B surface antigen positive?***

Health teaching in vernacular was designed and given to educate mothers about Hepatitis B as health intervention. The health teachings include consultation with a physician for sexual partners, information for the sexual partners of the use of protective barriers during sexual activity to prevent contamination with the virus, what to do with the household contacts, prevention of transmission of the Hepatitis B virus to the medical personnel, the nursing personnel and the rest of the other in hospital patients.

CONCLUSIONS

There might be a bigger population of Hepatitis B surface antigen positive mothers at Camiguin Island but may not have been diagnosed because of the following reasons, these mothers did not have prenatal care, that blood sample was not taken during the entire pregnancy , the research covered only one hospital which excluded the other hospital in the island, the research did not include the other health facilities like the health centers, the research covered only the hospital born babies, there are babies who are home delivered and not included in the study, lastly the study covered only two months . There might be more than five percent of the population of babies who are born from mothers with positive Hepatitis B surface antigen.

RECOMMENDATIONS

Since these mothers are newly diagnosed to be positive for Hepatitis B surface antigen , and they are first time mothers they were advised that on future pregnancies, they will inform their physician of their Hepatitis B surface antigen status so that their future babies will be given immunoprophylaxis against Hepatitis B. Their sexual partners should consult a physician, so that

they will be immunized and prevent contact with body fluids of their sexual partners (the mothers) and use of protective barrier during sexual activity. Close household contacts should consult a physician and be immunized also.

The medical and the nursing personnel must be informed of the Hepatitis B surface antigen status of the mothers so that in case of accidental needle pricks, vaccination will be done to them. Instruments used for the care of these mothers especially during the delivery process(whether normal delivery or cesarean section)will not be recycled but will be discarded such that other patients will have no opportunity of using the instruments used by the patients who are Hepatitis B surface antigen positive. Prevention of contact of body fluids will be done and mothers with positive Hepatitis B surface antigen will be isolated from the rest of the other in hospital patients.

The community should provide support to the pregnant women and advice on proper prenatal care so that there will less number of women who will go through pregnancy unexamined for Hepatitis B surface antigen and for the local government it is recommended that funds will be allotted for mandatory examination of Hepatitis B surface antigen to all pregnant women, since perinatal transmission of the disease is the mode of transmission which perpetuates it.

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