

# EVALUATION OF HEPATITISB SEROLOGY AFTER PRIMARY IMMUNIZATION IN THE BABIES OF HEPATITISB CARRIER MOTHERS



ÖYKÜ ZEREN ÖZEREN<sup>1</sup>, HALİME ÇALI ÖZTÜRK<sup>2</sup>, RABİA ZEHRA BAKAR<sup>3</sup>, ÇAĞLAR ÇETİN<sup>4</sup>, EMEL TORUN<sup>5</sup>

¹BEZMİALEM VAKIF UNIVERSITY, FACULTY OF MEDICINE, ISTANBUL, TURKEY

## PLAN

- INTRODUCTION
- METHOD
- RESULTS
- CONCLUSION

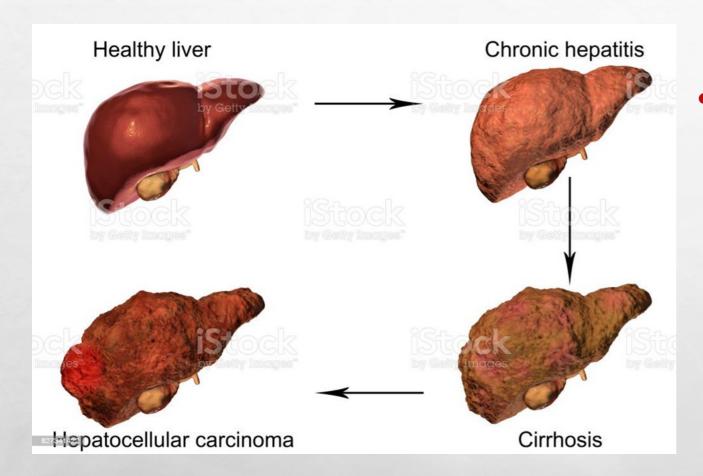


### INTRODUCTION



• HEPATITIS IS AN INFLAMMATORY SITUATION OF THE LIVER CAUSED BY HEPATITIS B VIRUS (HBV). HEPATITIS B CAN BE TRANSMITTED THROUGH INFECTED BODY FLUIDS SUCH AS BLOOD AND SALIVA, AND IT CAN ALSO BE TRANSMITTED VERTICALLY (PERINATALLY) FROM CARRIER MOTHERS TO THEIR BABIES.

PERINATAL TRANSMISSION MAY RARELY OCCUR TRANSPLACENTALLY, BUT USUALLY OCCURS WITH BLOOD AT BIRTH.



• IF HEPATITIS B IS NOT TREATED, THE DISEASE CAN PROGRESS TO LIVER DISEASES SUCH AS CIRRHOSIS AND HEPATOCELLULAR CARCINOMA, AND TO EXTRAHEPATIC DISEASES SUCH AS GLOMERULONEPHRITIS AND POLYARTERITIS NODOSUM.

• IN OUR COUNTRY, INFANTS OF HEPATITISB CARRIER MOTHERS ARE VACCINATED AND ADMINISTRATED WITH IMMUNOGLOBULIN AT BIRTH. ALSO, THE INFANTS ARE VACCINATED AGAIN WHEN THEY ARE 1 AND 6 MONTHS OLD. IF THE INFANT'S WEIGHT IS LESS THAN 2000 GRAMS, THE INFANT IS WAITED UNTIL IT'S WEIGHT REACHES 2000 GRAMS AFTER THE VACCINATION AND IMMUNOGLOBULIN (IVIG) AT BIRTH. THEN, THE VACCINATION IS CONTINUED WITH 0-1-6 PLAN.





• IN SEROLOGIC EVALUATIONS, HEPATITISB ANTIGEN (HBSAG) POSITIVITY MEANS CARRIAGE. HEPATITISB ANTIBODIES (ANTI-HBSAG) IN IGG & IGM STRUCTURE SHOWS IMMUNIZATION. IN TURKEY, AFTER THE VACCINES ARE ADMINISTERED, IMMUNIZATION IS EVALUATED WITH HEPATITISB ANTIBODY WHEN THE INFANTS ARE 9 AND 15 MONTHS OLD.

ANTIBODY POSITIVITY SHOWS
 THAT THE INFANT IS IMMUNIZED.
 IF ANTIBODIES ARE NEGATIVE,
 THE INFANT IS VACCINATED AND
 SEROLOGY IS EVALUATED AGAIN.
 IF THE ANTIBODY RESPONSE DOES
 NOT OCCUR AGAIN, THIS TIME
 THE INFANT IS NOT VACCINATED.
 IF CONTACT WITH HEPATITIS B IS
 DETECTED, IMMUNOGLOBULIN
 (IVIG) IS ADMINISTERED.



vaccinated and administrated with summary of vaccination immunoglobulin at birth program of the infants of and also vaccinated again hepatitisB carrier mothers: when they are 1 and 6 months old if the infant's weight is serologic evaluations less than 2000 grams if antibodies are negative, the the infant is waited until it's infant is vaccinated and serology weight reaches 2000 grams after is evaluated again. if the antibody antibody positivity shows that the vaccination and response does not occur again, this the infant is immunized immunoglobulin (ivIg) at birth. time the infant is not vaccinated. if Then, the vaccination is continued contact with Hepatitis B is with 0-1-6 plan. detected, immunoglobulin (ivIg) is administered.

• IN STUDIES EVALUATING HEPATITISB SEROLOGY, GESTATIONAL WEEK, GENDER, DURATION OF BREASTFEEDING, TYPE OF DELIVERY, AND BIRTH WEIGHT ARE RARELY TAKEN INTO CONSIDERATION. WE AIM TO CONTRIBUTE TO THE ELUCIDATION OF THE EFFECT OF THESE CHARACTERISTICS IN OUR STUDY.



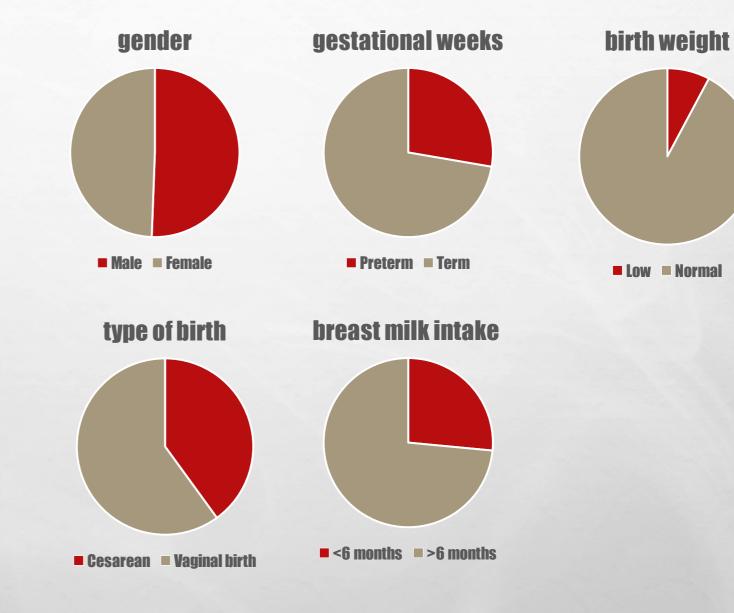
#### **METHOD**

• INFANTS OF HEPATITISB CARRIER MOTHERS PRESENTED TO BEZMİALEM VAKIF UNIVERSITY MEDICAL FACULTY HOSPITAL PEDIATRICS AND OBSTETRICS&GYNECOLOGY POLYCLINICS WERE INCLUDED IN THE STUDY. THE DATA, INCLUDİNG THE INFANTS' IMMUNIZATION STATUS, GENDERS, GESTATIONAL WEEKS, TYPE OF BIRTH, BIRTH WEIGHTS, AND DURATION OF BREAST MILK INTAKE WERE COLLECTED FROM THE HOSPITAL DATABASE OF PREVIOUSLY FOLLOWED PATIENTS IN THE PRESENCE OF A PHYSICIAN. THE EFFECT OF THESE CRITERIA ON IMMUNE RESPONSE FORMATION WAS EVALUATED.

## RESULTS



OF THE 166 PATIENTS EVALUATED, 50.6% OF THEM WERE MALE (GROUP1), 27.7% OF THEM PRETERM (GROUP2), 7.8% OF THEM HAD LOW BIRTH WEIGHT (GROUP3), 40% OF THEM WERE A CESAREAN DELIVERY BABY (GROUP4), 26.5% OF THEM BREASTFED FOR LESS THAN 6 MONTHS (GROUP5).



IT WAS OBSERVED
THAT THESE
CHARACTERISTICS
DID NOT AFFECT
IMMUNE RESPONSE.

P VALUES WERE:

GROUP1 P=0.680

GROUP2 P=1

GROUP3 P= 1

GROUP4 P= 0.234

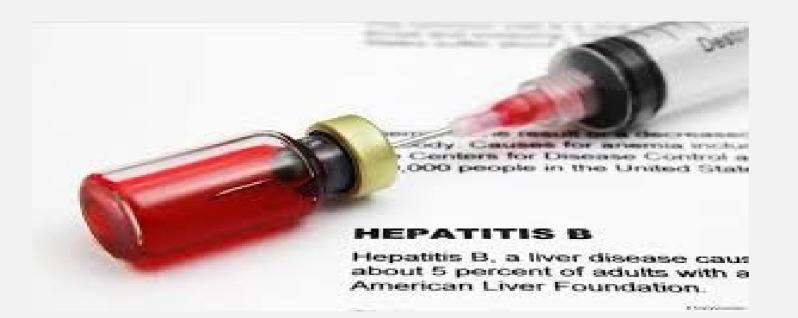
GROUP5 P= 1

*	P Values
Group1	p=0.680
Group2	p=1
Group3	p=1
Group4	p=0.234
Group5	p=1

#### **CONCLUSION**

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IT WAS OBSERVED THAT INFANT GENDER, GESTATIONAL WEEK, BIRTH WEIGHT, TYPE OF DELIVERY, AND DURATION OF BREASTFEEDING DID NOT AFFECT THE IMMUNITY DEVELOPED BY THE HEPATITIS B VACCINE.



# •THANK YOU FOR YOUR INTEREST