

# **Govt. Degree College, Rajampeta**

## **Department of ZOOLOGY**

**Academic year: 2024-25**

<b>1. Name of the Activity</b>	<b>GROUP DISCUSSION</b>
<b>2. Name of the Lecturer</b>	<b>Dr. N. Chandra Mohan</b>
<b>3. Date</b>	<b>06-08-2024</b>
<b>4. Number of students participated</b>	<b>11</b>
<b>5. Number of faculty involved</b>	<b>1</b>
<b>6. Aim &amp; Objectives:</b> <ul style="list-style-type: none"><li>• To Gain the knowledge and awareness about Rh Positive and Rh negative blood.</li><li>• To know the importance of Rh<sup>+</sup>ve and Rh<sup>-</sup>ve blood group during blood transfusions.</li><li>• To change the class environment.</li><li>• To enhance the thinking power of students.</li><li>• To improve the discussion skills of students.</li></ul>	
<b>7. Brief Report:</b> <ul style="list-style-type: none"><li>➤ Dept. Of Zoology was conducted a Group Discussion Programme to III Sem Students on 06-08-2024.</li><li>➤ From this programme the students were divided into 3 groups. All the students discussed about 'Erythroblastosis foetalis'.</li><li>➤ When Rh<sup>-</sup> women marries Rh<sup>+</sup> Man and gets pregnancy with Rh<sup>+</sup> baby, the baby produces Rh antigens. These antigens enters into the mothers blood through placenta. By the motivation of these antigens, mothers immune system produces Rh antibodies. These antibodies enters into the mothers womb and binds with the Rh antigens. These antigen-antibody complex is digested/destroyed by the macrophages. Hence the baby RBC ruptured and finally embryo will be die. This occurs only in the second pregnancy.</li><li>➤ From this programme students gain discussion skills and knowledge about erythroblastosis foetalis.</li></ul>	




Government Degree College  
Rajampet

Group Discussion [2024-2025]

Topic :- Erythroblastosis fetalis

Class :- II BSC Major Zoology  
[III sem]

Date :- 6-8-2024

Name of the Lecturer :-

Dr. N. Chandra Mohan



# Erythroblastosis fetalis

## Introduction

- \* Erythroblastosis fetalis is a hemolytic anemia in the fetus or neonate, caused by trans. Placental transmission of maternal antibodies to fetal RBCs.
- \* This disorder usually results from incompatibility between maternal and fetal blood groups, often Rh antigens.
- \* Rh factor
  - Individuals whose red blood cells agglutinate when mixed with antibodies to rhesus monkey blood are called rhesus positive ( $Rh^+$ )
  - \* → Individuals whose blood does not agglutinate when mixed with antibodies to rhesus monkey blood are called rhesus negative ( $Rh^-$ )
- \* If a  $Rh^-$  mother becomes pregnant by a  $Rh^+$  father and 1st baby is  $Rh^+$
- \* This means a  $Rh^+$  baby growing in a  $Rh^-$  mother.
- \* At the time of birth some of the baby's blood gets into the mother's circulation.



- \* This Sensitizes the mother to  $Rh^+$  blood and she produces anti- $Rh^+$  antibodies.
- \* If she has a second pregnancy with a  $Rh^+$  baby her antibodies may cross the placenta and destroy the baby's red blood cells.
- \* This Condition is called erythroblastosis foetalis.
- \* The baby either suffers from Jaundice, Anaemia, lack of blood supply to brain leads serious brain damages, still birth.
- \* These serious damages can only be prevented by a complete exchange of the newly born baby's blood.

### Treatment

- \* Administration of Rhogam [Antibodies to  $Rh^+$  cells] to mother just after delivery of the first child.
- \* Rhogam neutralises  $Rh^+$  cells thus preventing the production of anti  $Rh^+$  antibodies.

## Discussion Points :-

- \* Rh blood group
- \* Rh Incompatibility
- \* Signs of Rh incompatibility
- \* Erythroblastosis fetalis
- \* Diagnostic tools for Erythroblastosis fetalis
- \* Treatment and Prevention for Erythroblastosis fetalis.

*Amir*