

EHA-ISHBT Hematology Tutorial

Self-assessment Case – Session
[Case Based Discussion on SCD]

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| Introduction

- **F, 36 Yrs, SCD (HbSS), 1 or 2 unit / Year in last 5 years**
- **Hb: 7.2 gm%, DAT Neg , Received 3 Units of PRBC for Planned Cholecystectomy**

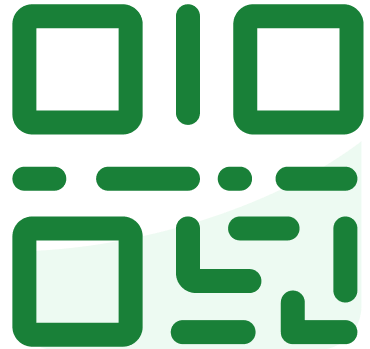
10 DAYS LATER

- **Joint Pain, Fever, Jaundice, Dark Coloration of Urine**
- **Hb: 5.8 gm%, Bilirubin: 11.5 mg%, LDH:1230 U/L**
- **Received another 2 units of PRBC (O +Ve)**
- **Situation Deteriorated and Referred to Clinical Haematology Department, SCBMCH**

Questions can be answered by scanning the QR on your phone to access Slido.

For each question you have 15 seconds.

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| Q1) What is Most Likely Diagnosis?

1. Hepatic Crisis
2. AIHA
3. Delayed Haemolytic Transfusion Reaction (DHTR)
4. PNH
5. Viral Hepatitis

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10.31 What is Most Likely Diagnosis?

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| Q2) What is the Patho-Physiology of DHTR ?

1. Allo-antibodies to Donor's Red Cell Antigen
2. Trigger of the Hepatic Crisis
3. Acceleration of Hb S Polymerization
4. Hyper- Spleenism
5. Infective Mechanism

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10.32 What is the Patho-Physiology of DHTR ?

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| Q3) All are the Risk Factors for DHTR, Except?

1. Cumulative Transfusion ≤ 12 Units
2. Cumulative Transfusion ≥ 12 Units
3. Transfusion in Acute Condition
4. History of DHTR
5. Presence of Red Cell Immunization in the Patient

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**10.33 All are the Risk Factors for DHTR,
Except?**

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| Q4) Which one is True for Prevention of DHTR ?

1. Transfusion should be only when absolutely indicated
2. Always Go For Extended Cross Matching Before Transfusion
3. Rituximab Prophylaxis Could be Helpful
4. It's a Serious Complication
5. All of the above

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10.34 Which one is True for Prevention of DHTR ?

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| Q5) A Must Effective Drug for Treatment of DHTR ?

1. Steroid
2. Azathioprine
3. IVIG
4. Erythropoietin
5. Rituximab

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10.35 A Must Effective Drug for Treatment of DHTR ?

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Q6) Which Modality of Treatment Could be Helpful in DHTR by Inhibiting the Compliment Activation System ?

- 1. Rituximab**
- 2. IVIG**
- 3. Steroid**
- 4. Plasmapheresis**
- 5. Eculizumab**

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10.36 Which Modality of Treatment Could be Helpful in DHTR by Inhibiting the Compliment Activation System ?

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| Discussion

- **Red Cell Transfusion: When Absolute Needed / No Alternative Modality**
- **Extend Cross Match: Rh (D,C,E,c,e), K / Fy, JK , MNS**
- **Ritux. Prophylaxis: High / Intermediate Risk**
- **After Transfusion:**
 - a) Close Monitoring**
 - b) Early Diagnosis**
 - c) Effective Management: IVIG, Supportive Therapy, Eculizumab**

| References

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2. **ASH Edu. Book 2023**
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5. **France Pirenne 2018, Blood:131(25): 2773 – 81**
6. **Petz LD 1997, Transfusion: 382**
7. **Habibi A 2018 Am J Hematol: 981**
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