



# what is the state of art in transfusion safety and anti-viral treatment of Thalassemia Syndromes KSA



**1<sup>st</sup> International Working Group on Thalassemia:**

IS IT TIME TO REVISIT CLASSIFICATION  
OF THALASSEMIA SYNDROMES ?

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**Following the Policy of the National Regulation 3.3 , page 17, on CME disclosures, dated 5 November 2009, and on behalf of the Provider , - Collage S.p.A.- n. 309**

**I Dr Farrukh SHAH HERE DECLARE**

**DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS**

**NO**, have no relevant personal financial relationship in the medical/health field.

**DISCLOSURE OF PROMOTIONAL TALKS**

**YES**, I have presented promotional talks for one or more pharmaceutical companies within the past 12 months

*\*if yes please provide information below.*

- ...Novartis on cultural aspects of thalassaemia with no discussion about exjade

*I understand that continuing education accreditation guidelines prohibit me from accepting any reimbursement (financial, gifts or in-kind exchange) for this presentation from any source other than the accredited CME provider ( Collage S.p.A.)*

15-16 September, 2017

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# King Khalid University hospital and State of Art

- Limited phenotype on sickle and thalassaemia patients since 2009: alloimmunisation 5%; prior to this 22%
- Full virology screening available
- Blood shortages are an issue for reasons outlined further
- Average pre transfusion Hb was 75-85g/l but now at 95-100g/l

# Transfusion safety: it is not about the testing alone!

- Patients across Saudi Arabia remain under transfused and often have thalassaemia facies
- Multiple reasons for this:
  - Parental denial/patient lack of awareness
  - Doctor lack of awareness: service doctors are often doing the same job for many years, no obligation on hospital to provide training/educational updates to staff grades
  - Nursing situation is similar to the doctors
  - Language barriers with expat staff/ staff not being trained in empowering patients/ locus of control being with the medical teams not the patient
  - Lack of blood

# Blood transfusion safety KSA

- Hospitals are blood donation, processing and administration centres
- The lack of a centralised process means individual centres may run short of blood/ blood products
- State of the art testing is available so blood is very safe:
  - Full virology via immunological testing and NAT for HIV, hepatitis B, HCV; antibody screening for HTLV1 and 2, syphilis, malaria
  - Do not test for hepatitis E, Chagas disease, west Nile virus or CMV
- Processes are the primary challenge in order to prevent blood shortages for regularly transfused patients and patients with Antibodies

# solutions

- Centralised regional/city wide blood banking
- Good communication between day units and hospital blood banks about patients expected for transfusion so blood can be held back for them
- Good communication with donors who are compatible so they can be planned for donations.

# Anti-viral treatment

- Relatively young population of thalassaemia patients ( majority less than 40 yrs old)
- HCV infection is uncommon
- Active liver units at specialist and university hospitals
- Can provide all the treatment options

# Prevalence of Hepatitis infections

- Riyadh KKUH 1997: 78 Sickle cell and thalassaemia patients 33% positive for HCV (26/78)
- Medina 2000: 80 patients 40% (32/80) Positive for HCV
- Riyadh KKUH 2017: most patients cleared HCV with Peg Interferon and ribavarin, around 4-5 patients remain RNA positive and are planned for treatment



# acknowledgements

- Haematology team at KKUH in particular
  - Dr Khalid El Saleh
  - Dr Ammarah Afzal
  - Dr Halima Cana
  - Dr Saadiya Nazli