

Blood transfusion services in Iraq; an unfortunate field

Irak'ta kan transfüzyon hizmetleri: talihsiz bir alan

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To the Editor,

Iraq is unfortunately still delayed in the development of blood transfusion services. My tenure for over 18 months as head of the blood transfusion center in one of the major teaching hospitals in Baghdad, Iraq, Al-yarmouk Teaching Hospital, led me to this unpleasant conclusion.

There is an absence of almost any type of scientific interest, e.g., no Iraqi blood banking or hematology journal and no actual scientific meetings to review and improve the work in this field. There is also a lack of proper training and continuing medical education programs for the staff. Other deficiencies in the blood transfusion services are summarized hereunder:

1. *Absence of obligatory, clear and acceptable minimal standards that should be available before starting a new blood transfusion center, such as regarding building size and size and number of rooms.* The blood transfusion center in Al-Yarmouk Teaching Hospital is composed of only a small part of the building housing the teaching laboratories, with a few small rooms that do not meet any written national or international standards [1].
2. *Unavailability of normal ranges for Iraqi hematological indices, as normal hemoglobin concentration or PCV %.* As a result, there is continuing unfruitful debate about the lower accepted values for blood donation.
3. *Absence of medical record profiling and a registration process, with absence of computerization and networking services.*
4. *Improper interviewing of blood donors due to lack of privacy, insufficient number of examining doctors and medical assistants, and inadequate history taking and physical examination.* There is also insufficient attention given to the regular and on-need voluntary blood transfusion programs with self-acceptance and self-deferral issues.
5. *Chronic inadequate and irregular supply of empty blood bags, instruments and disposables.* The blood transfusion center in Al-Yarmouk teaching hospital was left without blood bags for a few months in 2008 [2].
6. *Incomplete choice of combination of tests on blood donation that should be used in each center, with absence of HCV NAT on pooled plasma, ELISA anti-CMV Ab, ELISA anti-HTLV-I Ab, and optional test for malaria.* Not unexpectedly, no antibody screening is done on blood donations.
7. *The choice of cross-matching procedure has not been reviewed in the last three decades, in order to delete unneeded and confusing steps or to add essential improved ones.* For example, the immediate spin (IS) step is left for a 30-minute incubation period, leading to a high rate of false positives (detecting clinically insignificant cold antibodies, causing confusion), and as a result, many needed blood transfusions are cut short because tests are not carried out only at 37°C, but also at room temperature with a long incubation period. While not supported by any scientific reference, the staff are required to do so as mentioned in the standard procedures for Iraqi blood banking. Furthermore, apart from major cross-match, there

is absence of abbreviated cross-matching, antibody screening and antibody identification tests. There is also a lack of clear emergency guidelines on abbreviated cross-match and how to shorten time of delivery, as there is no clear policy for emergency blood transfusion, and the decision is left to the local personnel who are almost always non-qualified to make such decisions.

8. *In all cases, the only blood group typing available is ABO and Rh D.*
9. *Insufficient recipient blood sample storage time (less than 24 hours at most, and usually much shorter).*
10. *Apart from the conventional polyspecific DAT and IAT, absence of monospecific DAT and all antibody identification, characterization and specification tests in warm and cold immune hemolytic anemia.* Antibody screening and identification panels are not yet available for routine use.
11. Chronic inadequacy in preparing and transfusing leuko-depleted blood components, with a continuing erroneous

focus on transfusing whole blood even in cases when there is a clear indication for only blood components, as in thalassemia major patients.

In conclusion, the Iraqi health authority needs to undertake a thorough and complete scientific revision with respect to all aspects of blood transfusion services with an accepted budget arrangement in order to reach the unequivocal aim of providing safe and effective blood transfusion services.

References

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2. Abbas Hashim Abdulsalam and Sahar Hisham Abdulrazzaq: Underestimating the expected need for blood transfusion in elective procedures; a consistent feature of blood ordering system in Iraq. British Journal of Haematology. {Article in press}.