



Detection, prevention and management of iron deficiency in blood donors : ethical questions

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Journée de Printemps SFTS-SFVTT, 18/05/2018

- **Conflicts of interest: none**
- **This presentation only reflects this author's opinion**

Background



*Advancing Transfusion and
Cellular Therapies Worldwide*

Association Bulletin #17-02

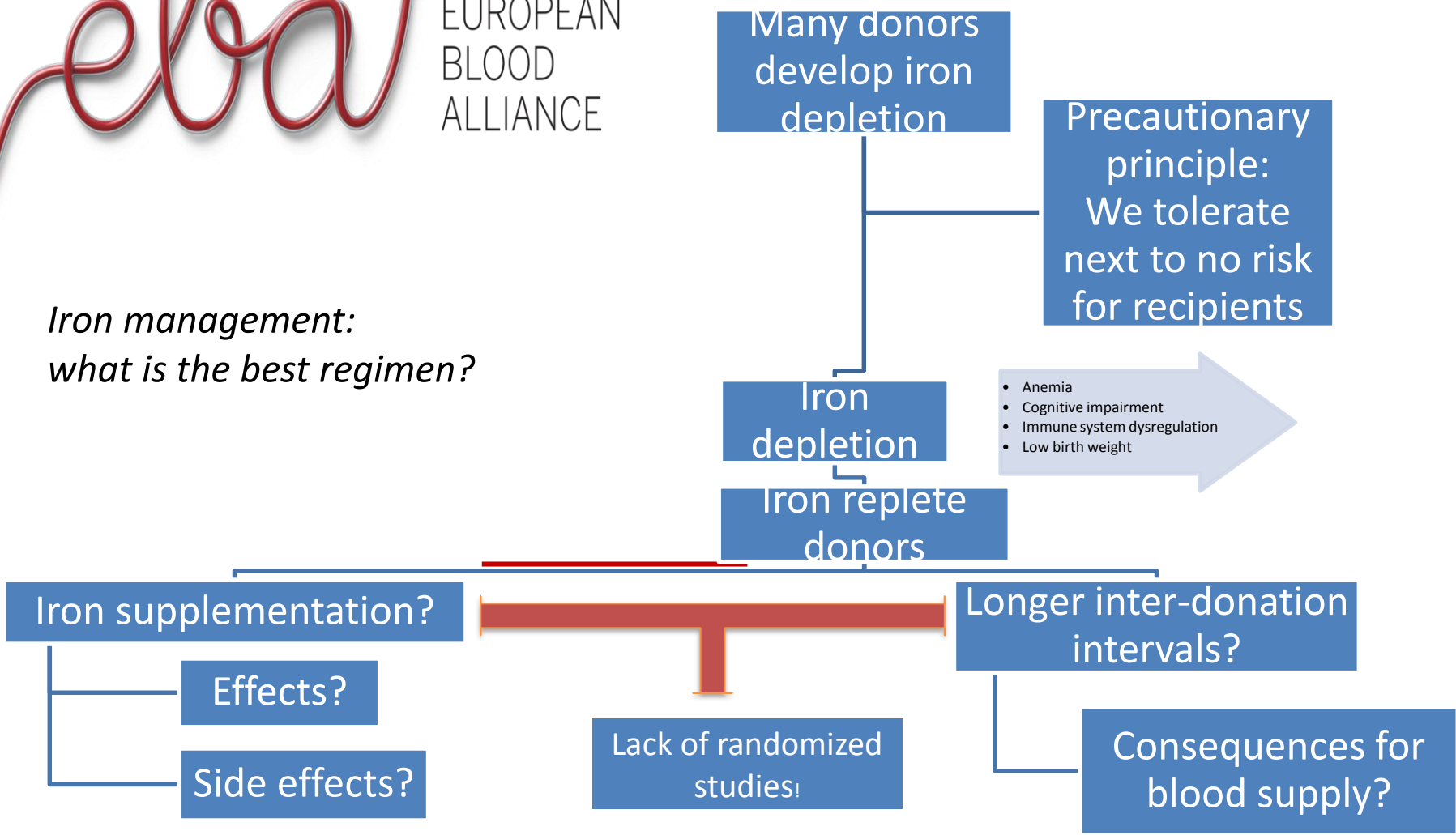
postdonation iron deficiency.¹ Mounting evidence indicates that frequent donors require iron supplementation to prevent significant iron depletion that may have deleterious health consequences. Blood collection establishments should therefore take action(s) with all donors or selected subpopulations at risk for, or from, iron deficiency (listed below) to include at least one of the following interventions/strategies: 1) development of programs to provide replacement iron in the absence of ferritin measurements, 2) evidence-based lengthening of the interdonation interval and/or restriction of the number of donations per year, or 3) measurement of serum or plasma ferritin leading to recommended actions (including iron supplementation) for donors with low ferritin levels.



EUROPEAN
BLOOD
ALLIANCE

Courtesy Christian Erikstrup

*Iron management:
what is the best regimen?*



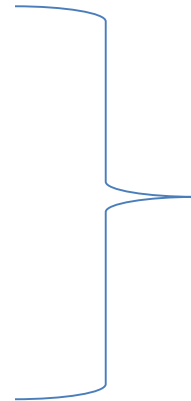
Ethical principles for protecting donors' and patients' safety



4 main principles of biomedical ethics

Beauchamp & Childress, well acknowledged

- Autonomy
- Non-maleficence
- Beneficence
- Justice



Human dignity

Ethical principles for donors

1. Autonomy



- Calls for ***respecting the decision-making capacities*** of autonomous donors and enabling them to make reasoned informed choices about their donations.
- Respect for autonomy involves
 - ***Information*** (risks to donor) and ***consent*** before donation.
 - ***No undue influence or pressure***

Ethical principles for donors

1. Autonomy, information



Could an unknown/undetected iron deficiency impact donor's autonomy?

- ***Yes***
- ***No***

Ethical principles for donors

2. Non-maleficence



- *Avoiding* the causation of *harm* to the donor
- Compliance with **professional standards**
- Continuous improvement of knowledge and **prevention of adverse reactions** to blood and blood component collections
- Avoidance of unnecessary donor selection

Ethical principles for donors

2. Non-maleficence



Could blood collection in donors with unknown/undetected iron deficiency cause harm to donors?

- ***Yes***
- ***No***

Ethical principles for donors

3. Justice



- ***Avoiding*** the "burden of donation" being shifted to underprivileged populations
- eg (international) Remuneration of donors: risk that those who are most likely to donate belong to ***lower socio-economic groups*** and be the least likely to benefit from blood products if they needed blood
- eg (France) IV IG, anti-D IG

Ethical principles for donors

3. Justice



Could blood collection in donors with unknown/undetected iron deficiency be considered as a "burden of donation" being shifted to underprivileged populations?

- ***Yes***
- ***No***



Ethical principles for donors

4. Beneficence

- Considering the balancing of benefits of blood donation against its risks and costs
- **Not applicable to blood donors:**
 - donor submitted to a medical procedure for which he/she will ***not derive any direct medical benefit***
 - any adverse reaction caused by the collection procedure ***will not be offset by a benefit*** to donor.

Ethical principles for patients

1. Autonomy



- Right for autonomous patients to determine what they ***will (and will not) be done with their own person*** and therefore to choose or refuse any proposed medical treatment.
- Respect for autonomy involves
 - ***Information***, professional and truthful, not withholding information from patient and/or family, and not advocating for one practice that might not be in the patient's best interest.
 - ***Consent*** before decision of transfusion or no-transfusion

Ethical principles for patients

1. Autonomy



If information of the patient included that RBC could be collected in donors with undetected iron deficiency, would this impact patient's autonomy and consent?

- ***Yes***
- ***No***

Patients vs donors: an ethical dilemma?



- **Donor's and patient's ethical principles in conflict?**
 - Ensuring safety of blood donors: prevention and treatment of iron deficiency
 - Vs safety of patients: maintaining a sufficient blood supply
- **Renewed ethical reflexion required**
 - **Evidence-based first**
 - Encouraging solutions **ethically acceptable** to **protect both donors and patients**

Perspectives, challenges



- **Need to escape any ethical dilemma**
 - Managing and preventing iron depletion and its adverse effects in **BLOOD DONORS**
 - AND**
 - Maintaining an adequate and safe blood supply for **PATIENTS**
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- **Need for appropriate measures in France**
 - **Scientifically sound** (based on available evidence)
 - AND**
 - **Ethically acceptable**



THANK YOU FOR YOUR ATTENTION

QUESTIONS?