Donor Health Care

From bystander to subject

Lucca, Italy, 5 October 2013
Today’s menu

• Donor Health Care project
• Donor Vigilance
• Voluntary Non-Remunerated Blood Donation
• Donor Selection
Donor Health Care
DoHeCa

- EU co-funding
  Erasmus Life Long Learning Programme
- Three year project: 2013-2016
- Deliverable: a curriculum for donor physicians and nurses
Donor of substances of human origin
Who are involved?
Needs and challenges of DoHeCa

- **The innovation** is a curriculum on caring for ‘donors donating substances of human origin’

- The **added value** is to make a European program

- The programme is supported by important players (EBA, ISBT, WHO etc).

- The program should serve the involved professionals

  The targeted participants are physicians and nurses.
Project management
- Peter van den Burg and Wim de Kort, project leaders, Sanquin.
- Elze Wagenmans, project coordinator, Sanquin

Project Consortium (partners)
- EBA
- NHS Blood and Transplant (UK)
- University Liège
- Irish Blood Transfusion Service
- European Homograft Bank (Brussels)
- Université Jean Monnet Saint-Etienne
- University Leiden
- Red Cross Flanders
- Europdonor (Leiden)
- Transplant Service Foundation (Spain)
- Righospitalet Denmark
- Croatian Institute of Transfusion Medicine
- Charité University Berlin
- University of Amsterdam

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DoHeCa associate partners

1. Netherlands Association for Donor Medicine
2. Dutch Transplant Foundation
3. European Association of Tissue Banks
4. International Federation of Blood Donor Organizations
5. International Society Blood Transfusion
6. American Association of Blood Banks
7. World Health Organization
8. American Society for Apheresis
9. European Society for Haemapheresis and Haemotherapy
10. European School of Transfusion Medicine
11. World Apheresis Association
12. European Society for Organ Transplantation
13. Dutch Blood Transfusion Society
14. BISLIFE Foundation
15. Établissement Français du sang
16. Dublin Institute of Technology
17. University of Ghent
18. University of New Mexico
19. University of Texas
20. DRK-Blutspendedienst
21. Red Cross Austria
22. University of Uppsala
23. Instituto Português do Sangue e da Transplantação
24. Centro Vasco de Transfusión
DoHeCa planning


- Work packages:
  1. General outline
  2. Basics
  3. Donor assessment
  4. Donation
  5. Application
  6. -10 Project management, dissemination and exploitation.

- Pilot E-learning starts October 2014.

- Curriculum contents, methods, structure and organization October 2016.
Donor Vigilance

From counting to action
<table>
<thead>
<tr>
<th>Category</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Complications mainly with local symptoms</td>
<td></td>
</tr>
<tr>
<td>(needle injury)</td>
<td></td>
</tr>
<tr>
<td>A1. Complications mainly characterized by the</td>
<td>Haematoma</td>
</tr>
<tr>
<td>occurrence of blood outside the vessels</td>
<td>Arterial puncture</td>
</tr>
<tr>
<td>- Delayed bleeding</td>
<td></td>
</tr>
<tr>
<td>A2. Complications mainly characterized by</td>
<td>Nerve injury</td>
</tr>
<tr>
<td>pain</td>
<td>Tendon injury</td>
</tr>
<tr>
<td>- Painful arm</td>
<td></td>
</tr>
<tr>
<td>A3. Other local symptoms</td>
<td>Thrombophlebitis</td>
</tr>
<tr>
<td>- Haematoma</td>
<td>Allergy</td>
</tr>
<tr>
<td>B. Complications mainly with generalized</td>
<td></td>
</tr>
<tr>
<td>symptoms</td>
<td>Vasovagal reaction</td>
</tr>
<tr>
<td>C. Complications related to aphaeresis</td>
<td></td>
</tr>
<tr>
<td>- Citrate reaction</td>
<td></td>
</tr>
<tr>
<td>- Hemolysis</td>
<td></td>
</tr>
<tr>
<td>- Generalized allergic reaction</td>
<td></td>
</tr>
<tr>
<td>- Air embolism</td>
<td></td>
</tr>
<tr>
<td>D. Other complications related to blood</td>
<td></td>
</tr>
<tr>
<td>donation</td>
<td>Iron deficiency</td>
</tr>
<tr>
<td>- Anaemia</td>
<td></td>
</tr>
<tr>
<td>Rate (2011) per 100,000 donations</td>
<td>Median of country rates</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>Vasovagal</td>
<td>604</td>
</tr>
<tr>
<td>WBD Apheresis</td>
<td>447</td>
</tr>
<tr>
<td></td>
<td>115</td>
</tr>
<tr>
<td>Rate of severe VVR</td>
<td>9</td>
</tr>
<tr>
<td>% severe (of total VVR)</td>
<td>0.7%</td>
</tr>
<tr>
<td>% delayed (of total VVR)</td>
<td>13.9%</td>
</tr>
<tr>
<td>Local complications</td>
<td>89</td>
</tr>
<tr>
<td>WBD Apheresis</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>227</td>
</tr>
<tr>
<td>Rate of severe local complications</td>
<td>2</td>
</tr>
<tr>
<td>Total (incl. other donation complications)</td>
<td>811</td>
</tr>
</tbody>
</table>
Steps in Donor Vigilance

A. Data!
- Obtaining good registration of donor complications
- From individual level to aggregate (rates per centre, trends)

B. Use your data
- Balanced information to donors
- Local evidence, feedback to blood collection staff

C. From data to interventions
- Generalisability of findings?
- Translation from research into everyday practice

D. Newer and controversial areas remain a challenge: iron status, long-term effects etc.
Voluntary Non-Remunerated Donations

From Money to Award
Remuneration?

- Cash money
- Vouchers
- Gifts
- Time off from work
- Discount
- Health check
- Decoration
Remuneration and compensation

• Non-remuneration is the written, guiding principle, but not a directive
• Exceptions do exist, especially in apheresis collections of plasma or components such as platelets
Remuneration of donations to the donor

- All donations unpaid: 17%
- Plasma donations paid: 12%
- Platelet donations paid: 12%
- All donations paid: 98%

Blood establishments (%)

Yes
No
Remuneration and compensation

• Non-remuneration is the written, guiding principle, but not a directive
• Exceptions do exist, especially in apheresis collections of plasma or components such as platelets
• Most payments to donors are expense allowances
• Compensation, often for time or expenses, may take several forms
Compensations for time or expenses to the donor

- Travelling costs
  - Yes: 80%
  - No: 20%
- Food voucher
  - Yes: 83%
  - No: 17%
- Day off from work
  - Yes: 34%
  - No: 66%
- Physical check-up
  - Yes: 85%
  - No: 15%
- Only on special occasions
  - Yes: 88%
  - No: 12%
- Other compensation
  - Yes: 83%
  - No: 17%
- No compensation
  - Yes: 73%
  - No: 27%

www.domaine-europe.eu
Legal/ethical considerations
(‘Oviedo Convention’)

- Law enforcement limited

General agreement on

- Dignity
- Non maleficence
- Fairness
Patient Safety

- Transfusion Transmittable Infections or Diseases more frequent in paid donors
  - NB: Risk in plasma products less than in labile blood products: red cells, platelets
- Quality of products from paid donors may be lower
  - e.g. lower protein and Immunoglobulin content in paid donors
- Lower availability of special products
Donor Base Management

• Co-existence of blood banks with paid and non-paid donors brings risk of disruption of the donor base
• Bankruptcy of commercial blood banks endangers blood supply
• Special blood products scarcely available from for-profit blood banks
Donor Safety

• Exploitation of donors is lurking
  o Low protein/immunoglobulin content without proper care
  o In contrast: increasing care in whole blood donors on management of iron status

• Donors tend to conceal health risks (dissimulation)

• Non transparency on adverse events
Why should blood donation be non-remunerated?
Donor Selection

From responding to incidents to validated actions
Some Donors pose a risk to themselves, or, to recipients

Motto: ‘Isolate them!!’

False assumptions

1. Five * Small = Large
2. Identification is perfect & easy
3. New donors equal general population
4. Regular donors equal new donors
5. Level of risk remains constant

* which is worse!
Tattoos!!

‘80’s-90’s hot news: cases of Hepatitis B after tattoo’

However

• Excess risk not exactly quantified
• Relative Risk (RR) = 3-5 in early studies

Since then

• # Tattoos increased: risk ↑
• Safety precautions increased: risk ↓

in the Netherlands RR=1!
Consequences

- # Deferrals to prevent one case is (very) high; in regular donors higher than in new donors

- # False positives (wrongful deferrals) always substantial

*Donors without risk factors still transmit hepatitis!*
Our donors deserve better!
Turn to actions, based on Risk Assessment

Ask yourself:
What is the
• Nature and size of the risk?
• Prevalence/incidence of the risk?
• Validity of the test?
• (If there is no test:) Validity of the question?
• Cost-effectiveness?
‘When I throw anti-lion powder in my backyard, the absence of lions does not proof its effectiveness’

Inuit proverb
Validated Questions