

The O Rh neg unit = “The Red Princess”

Ready for the dance
Much too popular!
12% of all issues
6-7% of population
10% of collections
14.1% of outdates
10% given to Rh+ to
avoid unit outdating
2.2% gap orders/donors
1.1% gap orders/issues



EMPTY POCKETS

I have no conflict of interest because I have no affiliation, sponsorship, honoraria, monetary support or conflict of interest from any commercial source



Objectives

- 1) Recognize inappropriate O Rh neg utilization
- 2) Identify/share resources/links to assist Med Lab Director in O Rh neg conservation discussions

In doing so we can; acknowledge the ethical dilemmas and pitfalls, use an accepted framework to assess/understand these stressful issues, identify resources to help us and consider our own need for resilience to stress

Indications

MANDATORY

O Rh neg patient with anti-D

O Rh neg female under age 60

Emergency use in female of unknown group under age 60

- NB emergency use should not be more than 2 units till group specific blood is available, ensure your lab can meet this expectation

Indications

RECOMMENDED

O Rh neg pts. who receive or are likely to receive repeated transfusions (e.g. thalassemia, MDS, SCD)



Indications

ACCEPTABLE

O Rh neg males, no anti-D, expected to receive less than 8 units

O Rh neg females over age 60, no anti-D, expected to receive less than 8 units

Non O Rh neg infants, under age 1, where group specific units are unavailable

Non O Rh neg patients needing special phenotype where group specific phenotype is not available

Indications

ACCEPTABLE

Emergency patients where the blood group is unknown at point of transfusion

- In hospital this should be only 2 units till group specific blood is available, except for ABO discrepancies. Very little blood is transfused in the field or in transit between hospitals, even with long air flights

Indications

UNACCEPTABLE

O Rh neg female, over age 60, no anti-D, in which more than 8 units are expected to be used

O Rh neg male, no anti-D, in which more than 8 units are expected to be used

The Case

Summer shortages/increased demand for blood,
CBS notification; low inventory/short shipments

One shipment a day, nearest access to blood is 150
km away, at a small centre which is also under the
same strain, or 230 km to next larger centre

Long weekend (traffic, boating, booze...)

A known O Rh neg Mom is laboring with VBAC

17 year old flips his dirt bike, of course he has been
drinking his birthday was yesterday, he is O Rh neg

The Case

Significant blood loss, injuries to limbs,
tourniquet/pressure for hemostasis

Ab screen neg, MLT substitutes O Rh pos RBCs as
per policy and notifies the Lab Dir. and Surgeon

RN Mom assuming alternate decision maker role
goes haywire!

Fundamentals of Medical Ethics

Autonomy- patient's perspective

Veracity- truth telling

Beneficence – MD/staff doing good

Nonmaleficence- doing no harm

Justice- being fair

- Perlin, TM. The Ethical Basis for Informed Consent, Stowell CP. Sazama K. eds. AABB 2007

Ethical Dilemmas

When a person's or group's ethical values or principles are challenged or in conflict with one another. Identifying which principles are in conflict is essential to an appropriate resolution.

Is there a dilemma here?

What about the Mom? Does she have an ethical dilemma?

Limit your expectations of others

Mom does not have an ethical obligation to all the other patients in the system. She is an advocate for her son as she sees fit! She is not an RN under the ethical expectations of her College etc... at this time. Nor is she an employee of the hospital subject to policy at this time.

Within the limitations of the laws in our civil society she can be as unreasonable (or proactive in her view) as she sees fit.

Ethical Conflict/Moral Peril

When one must make a choice between competing abiding moral principles or imperatives such that one is left with no good choices

Do you have a least bad option?

Are we in Moral Peril here?

Capacity to consent

It is the obligation of the MRP to determine capacity for consent. The mom's assumption that she is the alternate decision maker must be tested and pushed back if the patient has capacity.

The TM lab and Lab Dir. must ensure that P&P to support and document consent are in place

Failure to do so violates the principle of
Autonomy

Competent Minor/Mature Minor

<http://mjlh.mcgill.ca/pdfs/vol4-1/Harmon.pdf>

http://www.royalcollege.ca/portal/page/portal/rc/common/documents/bioethics/section1/case_1_5_2_e.html RCPSc

http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_96h02_e.htm Health Care Consent Act
1996

Competent Minor

<http://www.cps.ca/en/documents/position/treatment-decisions> Canadian Pediatric Society

The principle of an emancipated minor is enshrined in common law, ages 16-18, how this is applied to medical consent varies in its application between provinces

There is good research to suggest by age 14 most children have adult capacity

Risk vs benefit for informed consent

Discussion of the “real” risks and benefits plus mitigation strategies is needed (within limits of the time)

“Real” = a probability assessment e.g. forming alloanti-D is a real probability to consider but Transfusion Associated Reversible Posterior Leukencephalopathy is likely not

Failure to do so violates the principle of Veracity

Treatment goals with transfusion

Does the patient, who now has bleeding under control need the RBCs? Is there an safer better option? The bleeding injuries are not immediately life threatening but are limb threatening. OR is not going to proceed safely without transfusion

Consent includes the indication/intention

This is the principle of Beneficence

Are we going to do harm?

Not likely to have an AHTR this time; he may not form anti D

If he does he can wear a life alert bracelet
will not likely need blood in the future

Bracelet warns future care givers; if he does not wear the bracelet his anti-D will likely be detectible, if not then it might not cause an AHTR... BUT IT MAY

Are we practicing Non-maleficence?

To everything there is a risk but is
there a cure?



Mitigation Strategies Cure Also!

Prudent mitigation strategies followed up on with diligence, while admitting to the harm (disclosure of the role of the transfusion in forming alloanti-D) are part of the risk/benefit assessment and in the acts we practice daily

This is consistent with the principle of non-maleficence

What about your other patients?

Very real probabilities another patient will need
O Rh neg blood

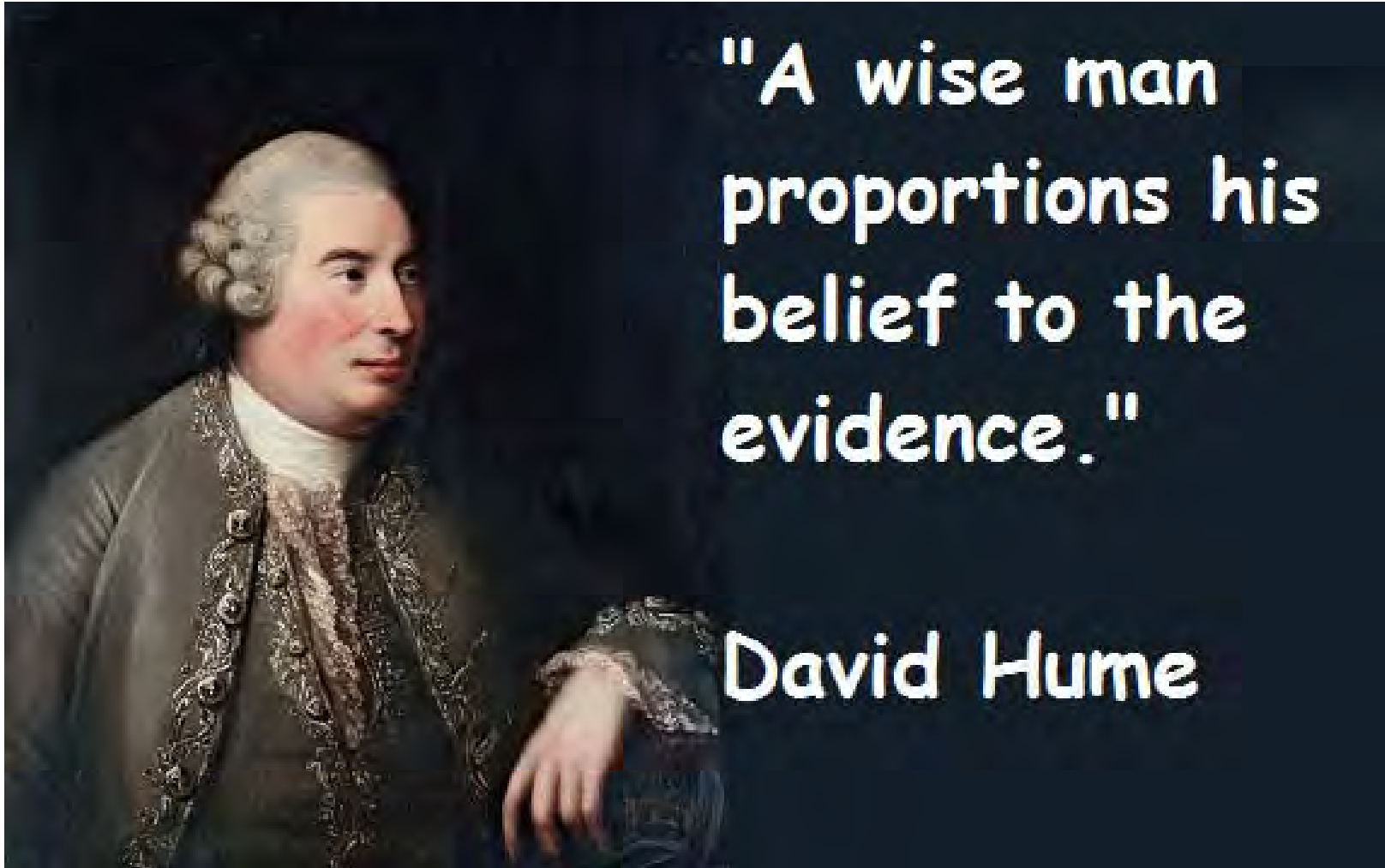
If we transfuse this patient we may have none

Do mitigation strategies for other patients exist?

May not exist or be less likely to change
outcomes e.g. a high titre anti-D in a woman
with future child bearing

Are we practicing Justice if we avoid any conflict
about this transfusion with the Mom?

What do you do?



"A wise man
proportions his
belief to the
evidence."

David Hume

The disclaimer, this is a mock run

We can calmly sit hear and talk today about this type of case and the clinical and ethical decisions of withholding or releasing a scarce and vital resource

No one developed a headache and irritable bowel from this “conflict” today

This is the real world

This is at midnight Friday Aug. long weekend, the Mom is screaming into your face and the ER doc and surgeons have “disappeared”



Practice Resilience and Self Care

<http://www.cma.ca/living/podcasts-resilient-medical-communities> CMA

<http://php.oma.org/PDF%20files/Articles/CanMEDS%20PHG.pdf> OMA

Resilience is recognized as one of the more important attributes to ensure long term effective participation in a stressful profession

Most MDs find the “gatekeeper” role of limited resources to be particularly problematic

Should MDs be gatekeepers?

<http://jme.bmj.com/content/27/4/268.full>

“Physicians have an ethical responsibility to their patients to offer the best AVAILABLE medical care. This role conflicts with their role as gatekeepers of the limited health care resources. It is ethically untenable to expect doctors to face this trade off during each patient encounter...”

“How can this acceptance of resource constraints come about...” Dr. M C Weinstein, Harvard School of Public Health

Where to go for help

ORBCON

<http://transfusionontario.org/en/>

May I thank everyone in ORBCON

Applause please

U of T Transfusion Medicine Monthly Rounds

Webcast and archived

I am a fan of the NHS resources

http://www.aabb.org/Pages/Product.aspx?Product_Id=1753 guidelines for informed consent

http://hospital.blood.co.uk/library/pdf/oneg_neg_factsheet.pdf UK NHS fact sheet for clinical staff, pinch it, add your own letterhead

http://hospital.blood.co.uk/library/pdf/Oneg_fact_fiction.pdf UK NHS info poster, pinch it and change the logos

More

http://hospital.blood.co.uk/library/pdf/o_rhd_n_eg_bookmark.pdf bookmark with indications, pinch it and change the logos

http://hospital.blood.co.uk/library/pdf/BSMS_ISI.pdf Issuable Stock Index, a management scheme to reduce O neg wastage, 10% of O neg blood is issued to avoid outdating, don't hoard this product

THANK YOU

