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 that 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://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 a 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 here 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/o_rhd_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_neg_bookmark.pdf bookmark with indications, pinch it and change the logos

http://hospital.blood.co.uk/library/pdf/BSMS_ISSI.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