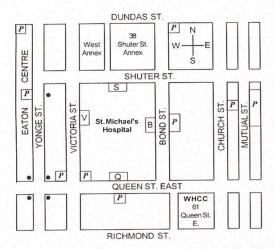
## The Location...

Blood Transfusion Services, located at the 2nd floor, Victoria Wing

#### Location of Hospital



P Parking

Subway

- B Bond Street Entrance
- Q Queen Street Entrance
- Shuter Street Entrance Victoria Street Entrance

# **Blood** Conservation **Programme**

**Blood Transfusions &** the Medical Alternatives

## **Blood Transfusion Services**

St. Michael's Hospital 30 Bond Street Toronto, Ontario M5B 1W8

tel: (416) 864-5084

Form NO. 69131 Dev. 10/2000





## Blood Transfusion: You have options.....

In health care, medical therapy involves some degree of risk. Patients make choices about the treatment after weighing the risks and benefits of their options. This is called informed consent or informed choice.

Informed consent to the use of blood transfusions involves a discussion with your doctor about blood transfusions and the use of alternatives.

Blood transfusion can sometimes be minimized or avoided by the skillful use of appropriate combinations of medical and surgical options (drugs, devices and techniques). This is called blood conservation. The options available for you depend on your conditions and the kind of treatment that you need. This pamphlet provides some of the possible options. With your doctor's help you can make informed choices that are right for you.

If you have any questions after reading this information, please write them down so that your doctor can answer them for you.

Reading this pamphlet does not take the place of a discussion with your doctor.

#### Contraindications

Erythropoietin is contraindicated in patients with:

- 1. Uncontrolled hypertension.
- Known hypersensitivity to mammalian cellderived products, albumin (human) or any component of the product.
- Patients with conditions associated with Thrombotic/Vascular events.

The use of erythropoietin in patients scheduled for elective surgery and not participating in an autologous blood donation program, is contraindicated in patients with severe coronary, peripheral arterial, carotid, or cerebral vascular disease, including patients with recent myocardial infarction or cerebral vascular accident.

# Adverse Events Hypertension:

Patients with uncontrolled hypertension should not be treated with erythropoietin; blood pressure may rise during erythropoietin therapy, often during the early phase of treatment when the haematocrit is increasing, especially in patients with chronic renal failure (CRF). EPO does not have direct pressor effects.

For patients who respond to erythropoietin therapy with a rapid increase in haemoglobin, the dose of Erythropoietin should be reduced because of the possible association of excessive rate of rise of haematocrit with exacerbation of hypertension.

#### Thrombotic/Vascular Events:

Patients with conditions associated with thrombotic/ vascular events should be closely monitored. However, the frequency of thrombotic & vascular events was not increased in patients undergoing EPO therapy before major elective orthopaedic cases.

Thrombotic/Vascular events were reported in <15% of patients in 3 studies. The overall prevalence of these adverse events in the groups of patients received EPO (100IU/kg and 300IU/kg did not differ significantly from control.

#### Seizures

Erythropoietin should be used with caution in patients with a history of seizures.

## Delayed or Diminished Response:

Inadequate response to erythropoietin should prompt an investigation for causative factors. If the patient fails to respond or to maintain a response, the following etiologies should be considered:

- 1. Iron deficiency.
- Underlying infections, inflammatory, or malignant processes.
- 3. Occult blood loss.
- Underlying haematologic disease (e.g. thalassemia, refractory anaemia, or other myelodypsplastic disorders).
- 5. Vitamin deficiencies: folic acid or vitamin B<sub>12</sub>.
- 6. Haemolysis.

#### Problems?

Contact Transfusion Coordinator at: 864-6060 x4055

## Laboratory Tests:

Haematology: Patients receiving erythropoietin should have haematocrit/haemoglobin levels measured weekly until hematocrit/haemoglobin has been stabilized, and measured periodically there after. The platelet count should be regularly monitored during the first 8 weeks of therapy. There may be a moderate dose-dependant rise in platelet count, usually within the normal range, during treatment with erythropoietin. This regresses during the course of continued therapy. Development of thrombocytosis is rare.

All surgery patients being treated with erythropoietin should receive adequate iron replacement throughout the course of therapy in order to support erythropoiesis and avoid depletion of iron stores (e.g. 300 mg Ferrous gluconate tid orally). Serum Ferritin should be measured at the initial assessment.

# Erythropoietin Dosage and Schedule

- a suggested dose is 300IU/kg, up to 4 weekly doses.
- · administered subcutaneously.
- · lead time presurgically is 4-6 weeks.
- some 3<sup>rd</sup> Party Insurance coverage possible.
  Requires assistance of Rx Eprex:
  Toll Free @ 1-877-793-7739
- requires Hb & platelets, Serum Ferritin, BP check prior to administration.
- Ferrous gluconate 300mg po tid must be taken 30 days prior to surgery in conjunction with EPO
- caution patients about the side effects of oral iron. (nausea, black stools)