

## The Management of Anaemia in Pre-Operative Assessment Clinics

The Health Service Circular 2002/009: Better Blood Transfusion - Appropriate Use of Blood (BBT2) recommends that for planned surgery, anaemia should be diagnosed and corrected, and haemostatic function should be optimised in advance of surgery.

*"Trusts should ensure that there are adequate arrangements for the pre-operative assessment of patients. For planned surgery, the arrangements for pre-operative assessment should permit the diagnosis and correction of anaemia in advance of surgery and optimisation of haemostatic function peri-operatively (including discontinuation of anti-platelet drugs and haematological advice for patients on oral anticoagulation). Most patients undergoing elective surgery should not require transfusion support if their pre-operative haemoglobin level is normal."*

The West Midlands Regional Transfusion Committee (WMRTC) are currently drafting some guidelines to assist with the management of anaemia in pre-operative assessment clinics. It is expected that these guidelines should be available by December 2007 on the following website:

<http://www.transfusionguidelines.org.uk/index.asp?Publication=RTC&Section=28&pageid=1025>

The main practice points for these guidelines will include:

- 1. Patients should be assessed at least 4 weeks prior to surgery to allow time to address anaemia. This may be initiated at the time of referral for surgery.**
  - The WMRTC audit of pre-operative assessment clinics (POACs) in 2007 found that the majority (73%) of patients were assessed within 2 weeks of surgery which does not allow sufficient time to prepare patients should their blood results and other investigations be found to be abnormal. Very few were seen at least 4 weeks prior to surgery.
- 2. The threshold for recognition of anaemia in POACs should be 12 - 13g/dl**
  - The WMRTC audit of pre-operative assessment clinics in 2007 highlighted that anaemia is not being recognised. Traditionally the Hb threshold for transfusion, and for safe anaesthesia has been set at 10g/dl. This arbitrary level has also become the action threshold for anaemia. The British Orthopaedic Association (2005) guidelines on blood conservation recognised the likelihood of transfusion in patients with a pre-operative haemoglobin of less than 12g/dl.
- 3. POACs should have written policies for the management of pre-operative anaemia, including referral for investigation and treatment.**
  - A study in 2005 in the West Midlands showed that only 39% of pre-assessment clinics within Trusts had policies for the management of patients presenting in their clinics with anaemia.
- 4. POAC's should examine their procedures to ensure that the results of any investigations requested are seen, reviewed and actioned in a timely manner.**
- 5. POACs should consider the use of oral iron supplementation in specific patients, and have a written policy on this. This may occur in conjunction with an appropriate referral.**
  - The WMRTC 2007 audit indicated that 92/387 (24%) of those with a Hb below 13 were hypochromic/microcytic and may have benefited from iron therapy. Only 14% of this group were given iron.
- 6. Patients found to be anaemic in the POAC should be reassessed with a repeat haemoglobin prior to surgery.**
  - The WMRTC 2007 survey found that only 47/387 (12%) of patients had a repeat haemoglobin prior to surgery.
- 7. Non-urgent surgery should when possible be deferred in anaemic patients where it is necessary to allow the investigation and correction of anaemia.**

### References:

- British Orthopaedic Association (2005) *Blood Conservation in Elective Orthopaedic Surgery*. British Orthopaedic Association. [www.boa.ac.uk](http://www.boa.ac.uk)
- Department of Health (2002) *Health Service Circular on Better Blood Transfusion: Appropriate Use of Blood*. HSC 2002/009 [www.dh.gov.uk/prod\\_consum\\_dh/groups/dh\\_digitalassets/@dh/@en/documents/digitalasset/dh\\_4012293.pdf](http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4012293.pdf)
- West Midland Regional Transfusion Committee (2005) *Pre-operative Assessment Clinics*. [www.transfusionguidelines.org.uk/index.asp?Publication=RTC&Section=28&pageid=1183](http://www.transfusionguidelines.org.uk/index.asp?Publication=RTC&Section=28&pageid=1183)
- West Midland Regional Transfusion Committee (2007) *Management of Anaemia in Pre-Assessment Clinics*. [www.transfusionguidelines.org.uk/index.asp?Publication=RTC&Section=28&pageid=1183](http://www.transfusionguidelines.org.uk/index.asp?Publication=RTC&Section=28&pageid=1183)