

HAEMATOLOGY SOCIETY OF AUSTRALIA AND NEW ZEALAND: TESTS, TREATMENTS AND PROCEDURES HEALTH PROFESSIONALS AND CONSUMERS SHOULD QUESTION

The Haematology Society of Australia and New Zealand (HSANZ) seeks to promote, foster, develop and assist the study and application of information concerning haematology, and to promote improved standards, interest and research in all aspects of haematology.

1. Do not conduct thrombophilia testing in adult patients under the age of 50 years unless the first episode of venous thromboembolism (VTE):

- **occurs in the absence of a major transient risk factors (surgery, trauma, immobility), or**
- **occurs in the absence of oestrogen-provocation, or**
- **occurs at an unusual site**

Thrombophilia testing is costly and can result in harm to patients if the duration of anticoagulation is inappropriately prolonged or if patients are incorrectly labelled as thrombophilic. Thrombophilia testing does not change the management of venous thromboembolism (VTE) occurring in the setting of major transient VTE risk factors.

Supporting Evidence

- Chong LY, Fenu E, Stansby G, Hodgkinson S. Management of venous thromboembolic diseases and the role of thrombophilia testing: summary of NICE guidance. *British Medical Journal* 2012;344:e3979.
- Wai KH, Hankey GJ, Eikelboom JW. Should adult patients be routinely tested for heritable thrombophilia after an episode of venous thromboembolism? *Medical Journal of Australia* 2011;195(3):139-42.
- Wu O, Robertson L, Twaddle S, Lowe GD, Clark P, Greaves M, Walker ID, Langhorne P, Brenkel I, Regan L, Greer I. Screening for thrombophilia in high-risk situations: systematic review and cost-effectiveness analysis. The Thrombosis: Risk and Economic Assessment of Thrombophilia Screening (TREATS) study. *Health Technology Assessment* 2006;10(11):1-110.

2. Limit surveillance computed tomography (CT) scans in asymptomatic patients with confirmed complete remission following curative intent treatment for aggressive lymphoma – except for patients on a clinical trial

CT surveillance in asymptomatic patients in remission from aggressive lymphoma may be harmful through a small but cumulative risk of radiation-induced malignancy. It is also costly and has not been demonstrated to improve survival. Therefore the anticipated benefits of post-treatment CT scans should be weighed against the potential harm of radiation exposure. Due to a decreasing probability of relapse with the passage of time and a lack of proven benefit, CT scans in asymptomatic patients more than 2 years beyond the completion of treatment are rarely advisable.

Supporting Evidence

- Thompson CA, Ghesquieres H, Maurer MJ. Utility of routine post-therapy surveillance imaging in diffuse large B-cell lymphoma. *Journal of Clinical Oncology* 2014;32:3506-3512.
- Huntington SF, Svoboda J, Doshi JA. Cost-effectiveness analysis of routine surveillance imaging of patients with diffuse large B-cell lymphoma in first remission. *Journal of Clinical Oncology*

2015;33(13):1467-74.

- Cheah CY, Dickinson M, Hofman MS. Limited clinical benefit for surveillance PET-CT scanning in patients with histologically transformed lymphoma in complete metabolic remission following primary therapy. *Annals of Haematology* 2014; 93:1193-1200.
- Lin TL, Kuo MC, Shih LY, Dunn P, Wang PN, Wu JH, Tang TC, Chang H, Hung YS, Lu SC. Value of surveillance computed tomography in the follow-up of diffuse large B-cell and follicular lymphomas. *Annals of Haematology* 2012;91(11):1741-5.
- Thompson CA, Charlson ME, Schenkein E. Surveillance CT scans are a source of anxiety and fear of recurrence in long-term lymphoma survivors. *Annals of Oncology* 2010;21:2262-6.
- Shenoy P, Sinha R, Tumei JW, Lechowicz MJ, Flowers CR. Surveillance computed tomography scans for patients with lymphoma: is the risk worth the benefits? *Clinical Lymphoma Myeloma Leukemia* 2010;10(4):270-7.
- Guppy AE, Tebbutt NC, Norman A, Cunningham D. The role of surveillance CT scans in patients with diffuse large B-cell non-Hodgkin's lymphoma. *Clinical Lymphoma Myeloma Leukemia* 2003;44(1):123-5.

3. Do not extend anticoagulation beyond 3 months for a patient with a non-extensive, index venous thromboembolic event (VTE), which occurred in the setting of a major, transient risk factor

Anticoagulation is potentially harmful and costly. Patients with a first venous thromboembolism (VTE) triggered by a major, transient risk factor are at low risk for recurrence once the risk factor has resolved and an adequate treatment regimen with anticoagulation has been completed. Evidence-based and consensus guidelines recommend three months of anticoagulation over shorter or longer periods of anticoagulation in patients with VTE in the setting of a reversible provoking factor.

Supporting Evidence

- Kearon C, Akl EA, Comerota AJ. Antithrombotic therapy for VTE disease: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines. 141(suppl 2):e419S-e494S.
- Boutitie F, Pinede L, Schulman S, Agnelli G, Raskob G, Julian J, Hirsh J, Kearon C. Influence of preceding length of anticoagulant treatment and initial presentation of venous thromboembolism on risk of recurrence after stopping treatment: analysis of individual participants' data from seven trials. *British Medical Journal* 2011;342:d3036.

4. Do not perform baseline or routine surveillance CT scans or bone marrow biopsy in patients with asymptomatic early stage chronic lymphocytic leukaemia (CLL)

In patients with asymptomatic, early-stage chronic lymphocytic leukaemia (CLL), baseline and routine surveillance computed tomography (CT) scans do not improve survival and are not necessary to stage or prognosticate patients. CT scans expose patients to small doses of radiation, and can detect incidental findings that are not clinically relevant but lead to further investigations and are costly. For asymptomatic patients with early-stage CLL, clinical staging and blood monitoring is recommended over CT scans.

Supporting evidence

- Oscier D, Dearden C, Eren E, Fegan C, Follows G, Hillmen P, Illidge T, Matutes E, Milligan DW, Pettitt A, Schuh A, Wimperis J. British Committee for Standards in Haematology. Guidelines on the diagnosis, investigation and management of chronic lymphocytic leukaemia. *British Journal of Haematology* 2012;159(5):541-64.
- Eichhorst B, Hallek M, Dreyling M, Group EGW. Chronic lymphocytic leukaemia: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Annals of Oncology* 2010;21 Suppl 5:162-4.
- Hallek M, Cheson BD, Catovsky D. Guidelines for the diagnosis and treatment of chronic lymphocytic leukemia: a report from the International Workshop on Chronic Lymphocytic Leukemia updating the National Cancer Institute-Working Group 1996 guidelines. *Blood* 2008;111:5446-56.

5. Do not treat patients with immune thrombocytopenic purpura (ITP) in the absence of bleeding or a platelet count <30,000/L without risk factors for bleeding

Treatment for immune thrombocytopenic purpura (ITP) should be aimed at treating and preventing bleeding episodes and improving quality of life. Unnecessary treatment exposes patients to potentially serious treatment side effects and can be costly, with little expectation of clinical benefit. Unless they are preparing for surgery or invasive procedure, or have significant additional risk factor for bleeding, ITP treatment is rarely indicated in adult patients with platelet counts greater than 30,000/L. In patients preparing for surgery or other invasive procedures, short-term treatment may be indicated to increase the platelet count prior to the planned intervention and during the immediate post-operative period.

Supporting evidence

- Neunert C, Lim W, Crowther M, Cohen A, Solberg L Jr, Crowther MA. The American Society of Hematology evidence-based practice guideline for immune thrombocytopenia. *Blood* 2011;117(16):4190-207.

How was this list created?

The Haematology Society of Australia and New Zealand (HSANZ) council, which includes 9 state representatives, convened to form the working group to produce a 'top 5' list for haematology.

Drawing on the list produced by the American and Canadian Societies of Haematology, the working group compiled a list of 5 clinical practices in haematology which may be overused, inappropriate or of limited effectiveness in a given clinical context.

This list was then sent out to all HSANZ members seeking feedback on whether these items fully captured the concerns of clinicians in an Australasian haematology medicine context and if not, whether any items should be omitted and/or new items added.

The criteria used to rate the practices were strength of evidence, significance in haematology and whether haematologists could make a difference in influencing the incidence of the practice in question.

Feedback on the items and the recommendations was received from 11 institutional haematology departments (following intradepartmental consultation) as well as an additional 10 individuals.

Based on these responses, the top 5 items were selected and finalised.