

Journal Watch

Assessment of iron status and the role for iron-replacement therapy in anaemic cancer patients under the care of a specialist palliative care unit

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Abstract:

Anaemia is common in advanced cancer, may develop for several reasons, and is not always symptomatic. Our observations of the seemingly indiscriminate prescription of iron-replacement therapy (IRT) for anaemic palliative care patients, and our practice of discontinuing IRT in patients with normal red-cell indices, prompted a study to determine (1) the prevalence of anaemia in our patients, (2) what proportion had iron deficiency, (3) the prevalence and benefits of IRT and (4) the prevalence of side effects attributable to IRT. The prevalence of anaemia was 65%. We found a 9% prevalence of iron deficiency, and suggestive but inconclusive evidence of iron deficiency in a further 41%, but only three (27%) of these patients had typical iron deficiency red-cell indices. Only two patients within the study population were taking IRT. Haemoglobin increased significantly in one, but fell in the other, and both experienced side effects attributable to iron. IRT should neither be indiscriminately prescribed nor withheld for anaemic palliative care patients, and the decision should not be based on red-cell indices alone. When symptomatic anaemia is found in patients whose general condition indicates that IRT would be acceptable, iron status should be fully assessed. A therapeutic trial of IRT may be justified where ferritin is elevated, but other parameters suggest iron deficiency.

Comments:

Strengths/uniqueness:

Helpful study in elucidating the limitations of red blood cell indices in determining iron deficiency and the difficulties with serum ferritin and transferrin. However, iron –transferrin ratio seems to be determining iron deficiency.

Weaknesses:

A longer period of follow up with a trial of iron replacement on suspected iron deficient patients would be more interesting and characterization of the patients with stool for occult blood would be helpful. Confounding factors such as folate and B12 levels could explain why red blood cell indices are unreliable in diagnosing iron deficiency as they may co-exist with iron deficiency.

Relevance to Palliative Care:

This study illustrates the complexity in interpreting and diagnosing iron deficiency in patients in cancer as there are other nutritional confounding factors. Further trials on the usefulness of iron replacement would be helpful in palliative patients deemed to be iron deficient.