

# Letters

## Lactoferrin and iron deficiency anaemia in pregnancy

I thank Dr Frayne and Clinical Nurse Consultant Pinchon for their review of anaemia in pregnancy (*AJGP* March 2019).<sup>1</sup> A significant barrier to treatment of iron deficiency anaemia (IDA) in pregnancy is that up to 70% of women have significant gastrointestinal intolerance to oral iron preparations, resulting in non-adherence with therapy in up to 50% of women.<sup>2-5</sup> Iron infusions are currently not recommended in the first trimester of pregnancy because of uncertainty regarding teratogenicity.

Lactoferrin is an iron-binding multifunctional cationic glycoprotein secreted by exocrine glands and neutrophils. It is present in large quantities in colostrum and breast milk. In addition to its iron-binding properties, lactoferrin also has antimicrobial, immunomodulatory, anti-inflammatory and anticancer activity. A systematic review and meta-analysis of four studies (600 women in total) found that four weeks' treatment with daily oral lactoferrin was as effective as daily oral ferrous sulphate in improving haematological parameters in pregnant women with IDA.<sup>6</sup> A randomised controlled trial comparing treatment of IDA with intravenous iron dextran, and treatment with twice daily oral lactoferrin together with health education from a nurse regarding IDA, found no statistical difference in improvement in haemoglobin concentration after four weeks, though there was a significantly greater improvement in iron indices with lactoferrin.<sup>7</sup>

In conclusion, oral lactoferrin may be a useful alternative in the management of IDA in pregnant women who are intolerant of oral iron supplements and who do not wish to receive parenteral iron therapy.

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## References

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