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Recombinant human erythropoietin in patients with inflammatory bowel disease and refractory anemia: A 15-year single-center experience

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IIntroduction

In this descriptive retrospective single-centre study, Katsanos and colleagues searched the records of all their IBD patients receiving EPO therapy between 1994 and 2009. The list included 26 IBD patients (16 UC, 10 CD) with particular refractory disease in need of immunomodulators (65%), or infliximab (27%). These subjects were receiving EPO therapy because their anemia was not responding to I.V. iron therapy or because of a poor tolerance, or severe adverse reaction, to I.V. iron therapy. The paper summarizes 15 years of experiences of a single centre with EPO therapy.

What this paper is about

Anemia, placing a great strain on affected patients' quality of life and ability to work, is present in one in five IBD outpatients (1), while one third of IBD patients suffer from recurrent anemia (2). IBD-associated anemia involves a combination of chronic iron deficiency and anaemia of chronic disease due to intestinal inflammation. The accompanying overproduction of cytokines is suspected of contributing to chronic disease anemia, as well as of inducing a relative deficiency of erythropoietin (EPO). Hence, EPO therapy is an effective, yet expensive, option that is reserved for the treatment of anemia refractory to I.V. iron therapy. Katsanos and his colleagues assessed short- and long-term responses to EPO therapy both 3 and 12 months after the end of the first EPO cycle, finding that more than 50% of the patients achieved Hb > 12gm/dL, while 85% responded either fully or partially to EPO therapy (Hb increase at least 1 gm/dL). Furthermore, the number of blood transfusions was reduced after EPO therapy and no adverse events were observed. However, careful monitoring of peripheral blood parameters was needed, and many patients required additional EPO therapy (27%) or I.V. iron therapy (39%) to avoid the recurrence of anemia.

Conclusion

The study once again underlines the need for further research in this field. In line with previous studies, it demonstrates that the treatment is safe and, together with the proper treatment of intestinal inflammation, is effective in treating refractory anaemia. This centre used one of many possible approaches to patients not responding to initial EPO dosing, and recommendations for a "target Hb-level" for EPO therapy, as well as optimal dosing, dosing modifications, and effect monitoring, are yet to be established.

References

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