nefrología
Revista de la Sociedad Española de Nefrología
www.revistanefrologia.com

Original article

Clinical impact of the ERBP Working Group 2010 Recommendations for the anemia management in chronic kidney disease not on dialysis: ACERCA study☆

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ARTICLE INFO

Keywords:
Anemia
Chronic kidney disease
Hemoglobin
Erythropoiesis-stimulating agents
Observational Study

ABSTRACT

Background and objective: The Anemia Working Group of ERBP in 2010 recommended a target hemoglobin (Hb) level in the range of 11-12 g/dL, without intentionally exceeding 13g/dL during the treatment with erythropoiesis stimulating agents (ESAs). This study evaluated if there was a clinical impact of this statement in the anemia management of chronic kidney disease (CKD) patients treated with ESAs not on dialysis in routine clinical practice in Spain.
Methods: This was an observational and cross-sectional study carried out in CKD patients not on dialysis in Spain who initiated ESA treatment (naïve), or were shifted from a previous ESA to another ESAs (converted) since January 2011.
Results: Of 441 patients evaluated, 67.6% were naïve and 32.4% were converted. At the study visit, 42.5% of naïve patients achieved the Hb target of 11-12 g/dL, with a mean Hb of 11.3±1.3 g/dL (vs 10.1±0.9 g/dL at the start of ESA therapy). Only 35.3% of converted patients maintained Hb levels within the recommended target at the study visit. Yet, 8.2% of naïve

☆ The results of this study have been presented at the American Society of Nephrology- Kidney Week 2012. 50th ERA-EDTA Congress 2013. World Congress of Nephrology 2013. XLII y XLIII Congresos Nacionales de la Sociedad Española de Nefrología.

☆☆ Investigators of the ACERCA Study Group are related in the appendix.

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patients and 7.9% of those converted had Hb levels >13 g/dL. Hb levels were similar across subgroups of patients, regardless of the presence of significant comorbidities.
Conclusions: Anemia management in CKD patients treated with ESAs by Spanish nephrologists seems to be aimed at preventing Hb levels <11 g/dL, while <50% of patients were within the narrow recommended Hb target range. This, together with the lack of individualization in Hb targets according to patients' comorbidities show that there is still room for improvement in renal anemia management in the clinical setting.

Impacto clínico de las recomendaciones de 2010 del grupo de trabajo ERBP sobre el tratamiento de la anemia en la enfermedad renal crónica sin diálisis: estudio ACERCA

Palabras clave:
Anemia
Enfermedad renal crónica
Hemoglobina
Agentes estimuladores de la eritropoyesis
Estudio observacional

RESUMEN

Introducción y objetivo: El grupo de trabajo europeo en anemia-ERBP recomendó en 2010 mantener los niveles de Hb entre 11-12 g/dL sin exceder intencionadamente de 13 g/dL durante el tratamiento con agentes estimuladores de la eritropoyesis (AEE). Este estudio evaluó si se produjo un impacto clínico de esta declaración en el tratamiento de la anemia en la enfermedad renal crónica (ERC) con AEE en la práctica clínica.
Metodología: Estudio transversal, observacional y multicéntrico en pacientes con anemia secundaria a ERC y no sometidos a diálisis, que iniciaron tratamiento de la anemia (nuevos) o pasaron de unos AEE a otros (transición de AEE) a partir de enero de 2011.
Resultados: De los 441 pacientes evaluados, el 67,6% eran nuevos y el 32,4% estaban en situación de transición. En la visita de estudio, el 42,5% de los pacientes nuevos habían alcanzado el rango de Hb de 11-12 g/dL (niveles medios de 11,3 ± 1,3 g/dL frente a 10,1 ± 0,9 g/dL al inicio del tratamiento con AEE), y el 35,3% de pacientes en situación de transición mantuvieron los niveles de Hb dentro del rango recomendado. A pesar de ello, el 8,2% de los pacientes nuevos y el 7,9% de aquellos en situación de transición tenían niveles de Hb > 13 g/dL. Los niveles de Hb fueron similares, independientemente de la presencia o no de comorbilidades significativas.
Conclusiones: En las Unidades de Nefrología de España, el manejo de la anemia en pacientes con ERC no en diálisis en tratamiento con AEE parece dirigido a evitar niveles de Hb < 11 g/dL, aunque menos del 50% de los pacientes se encuentran dentro del estrecho rango recomendado. Ello, junto a la falta de individualización del objetivo de Hb en función de la presencia de comorbilidades, muestra que aún queda margen de mejora en el tratamiento de la anemia en la ERC con AEE en la práctica clínica.

Introduction

Anemia is a common complication of chronic kidney disease (CKD), that is associated with a reduced quality of life (QoL)[1] and is a risk factor for morbidity and mortality. Thus, erythropoiesis-stimulating agents (ESAs) are considered as a key therapy in the management of CKD-related anemia,[2-4] considerably reducing the need of blood transfusions and improving the QoL of these patients, among other beneficial effects.

The use of ESAs aiming to normalize hemoglobin (Hb) levels (≥13 g/dL), as opposed to the partial correction of anemia (9.0-11.0 g/dL) has been associated with minor improvements in QoL (mainly fatigue),[3] but with an increased risk of cardiovascular complications. In this regard, contrary to initial observational studies that suggested positive outcomes associated with higher achieved Hb levels,[5,6] subsequent large multicentre randomized controlled trials (RCTs) and related meta-analyses[7-10] have demonstrated an association between allocation to higher Hb levels (which is also associated with higher ESA doses) and an increased risk of cardiovascular complications without a benefit on mortality.

Treatment of anemia with ESAs in CKD patients has thus experienced a significant shift from using Hb levels as a surrogate end-point, to a more individualized ESA therapy that takes into consideration Hb targets, required ESA doses, and patients' comorbidities, as well as a recent recommendation of administering the lowest possible ESA dose requi-