Iron deficiency with or without anaemia continues to be an issue in inflammatory bowel disease – Crohn's Colitis Cure (CCC) data insight's program

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INTRODUCTION & AIM

- Inflammatory bowel disease (IBD) increases the risk of nutritional deficiencies, particularly iron deficiency (ID), which is due to chronic blood loss from ulceration and intestinal inflammation causing increased iron demand and malabsorption
- Reported rates of ID in IBD cohorts largely vary from 23-90% worldwide, influenced by age, gender, nutritional status and comorbidities.
- ID can occur without anaemia and anaemia is not universally caused by ID

METHODS

- Crohn's Colitis Care is a cloud-based electronic medical record used in Australasia
- Data feed into a de-identified clinical quality registry (CQR), which was interrogated in April 2024
- People with IBD under active care (encounter within 14 months) were included to explore the prevalence of ID in this cohort
- ID was defined as a serum ferritin level of <30mcg/L or a serum ferritin level 30-100mcg/L and serum transferrin saturation <16%
- Anaemia was defined as a haemoglobin (Hb) of <130 g/L in males and <120 g/L in females.

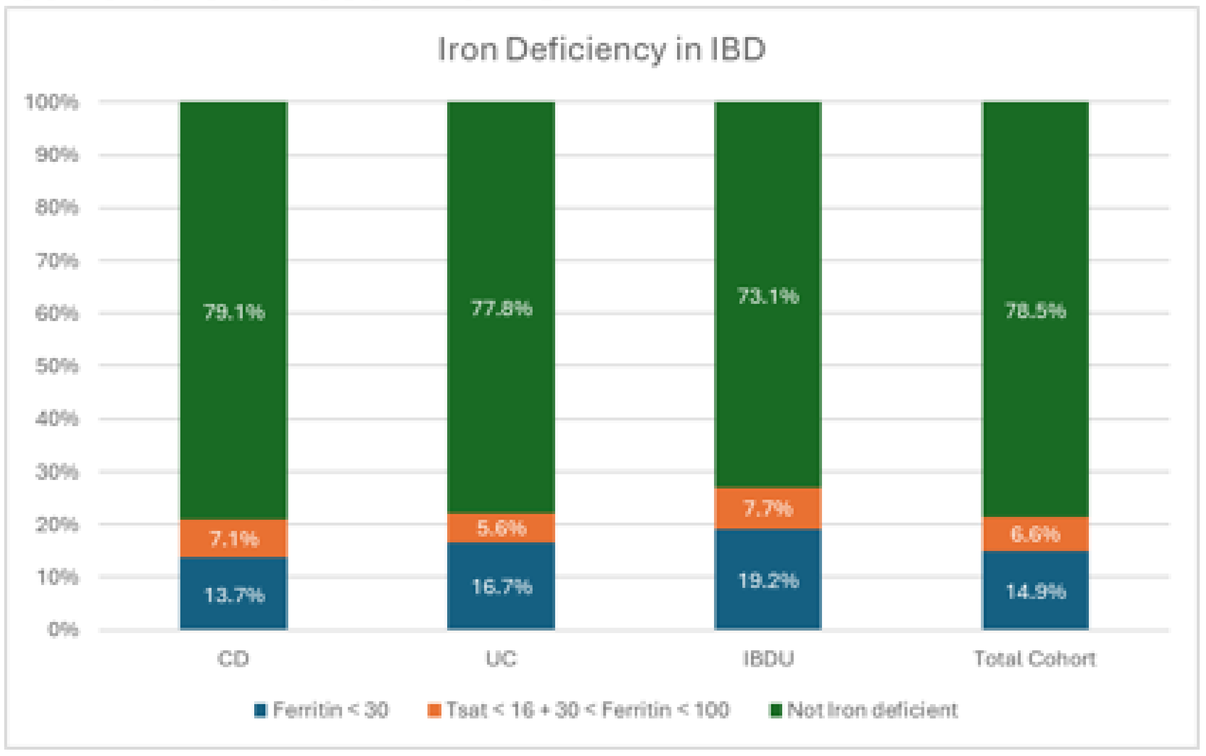
RESULTS

- Cohort under active care included **6,259 people**
  - **37.3% (n=2,335)** had iron studies (IS) (serum ferritin and transferrin saturation) and a Hb recorded
  - **87.2% (n=2,037)** resided in Australia and **12.8% (n=298)** in New Zealand
  - Median age = **41 years** (IQR 30-56)
  - **50.4%** were female
  - Crohn's disease (CD) affected **60.8% (n=1,419)**, ulcerative colitis (UC), **37.0% (n=864)** and IBD unspecified (IBDU), **2% (n=52)**
- **ID** was found in **21.5% (n=502)** of those with IS
  - There was an equal rate amongst IBD subtypes; **20.9%** 20.9% in CD, **22.2%** in UC and **26.9%** in IBDU.

RESULTS - *CONTINUED*

- Of those with ID, **26.7% (n=134) had concurrent anaemia - 28% (n=84)** in CD, **24% (n=46)** in UC, and **4% (n=4)** in IBDU).
- In those with ID, the **most common form of iron replacement was ferric carboxymaltose (n=45, 74%)**, yet overall, only **60/502 (12%)** with ID **were documented to have been given iron replacement.**
  - A subgroup analysis in those with ID at a single site showed that **45% (n=18/40) were prescribed iron replacement.**
  - The median C-reactive protein for those with IS was 2.3 (IQR 0.9-4.5).

Rate of ID comparing IBD subtypes and total cohort for those with IS



CONCLUSIONS

- ID is more common than ID with anaemia in this large ANZ IBD cohort
- While rates of ID with anaemia are low, it is likely to be impairing quality of life.
- Our data suggest either variation in iron repletion practice between sites or in its documentation;
- Despite the ease of diagnosis and the importance of managing ID, it remains an area with significant opportunity to improve practice and outcomes.
- Protocolised screening and repletion may be needed to ensure consistency.

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