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Improving compliance to DEXA in IBD population according to BSG guidelines in Morriston Hospital, Swansea

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IBD Follow up Clinic

Patient ID sticker

Date: **Weight:**

Diagnosis: **Year of diagnosis:**

Site of disease: **Surgery (if any):**

Secondary Diagnosis:

Current Medications:

Past treatments for IBD (And why stopped?):

Current Bowels Habits (Frequency/type/blood/mucous):

Last Faecal Calprotectin:

Last Endoscopy (including histology):

Surveillance colonoscopy due: **Booked:** Yes / No

Last MRI:

Bone density DEXA monitoring: **Smoker (Crohn's disease):** Yes / No

Comments (including plan for IBD Flare):

Follow up Plan:

Fig 1. Clinic pro forma for IBD follow-up patients.

Introduction and aims

Individuals with inflammatory bowel disease (IBD) have an increased risk of osteoporosis compared with the general population.[1,2] Bone disease is attributed to vitamin D deficiency, steroid use, and/or systemic inflammation[3] and deficits in bone mass can persist despite absence of symptoms of active IBD.[4] Osteoclastogenic function of multiple cytokines have been documented.[5] Screening, monitoring and treatment for osteoporosis and low bone mineral density is recommended and has shown to reduce associated risks.[7–10]

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A large percentage of IBD patients at risk of osteoporosis did not have appropriate bone mass density testing and there is only one similar previous project found on literature review.[6] We aim to improve return rate of dual-energy X-ray absorptiometry (DEXA) in IBD population by at least 20% according to British Society of Gastroenterology (BSG) guidelines criteria.

Method

Retrospective data collected over the past 12 months (September 2020 to September 2021) from IBD follow-up clinics through screening of clinic letters. Inclusion criteria was set according to BSG guidelines (three indications of DEXA).

Results

Pre-intervention data:
A total of 450 medical records from IBD follow up clinics were screened. DEXA was indicated in 115 (25%) of those patients due to one or more reasons. DEXA was requested in 17% (20/115) patients while it was not requested in 83% (95/115) patients.

Interventions:

- Educating stakeholders (junior doctors, IBD clinical nurse specialists, consultants) done through teaching session.
- Introduction of a clinic pro forma for IBD follow up patients (Fig 1) after collaboration with two other centres in Wales.
- Patient empowerment through pre-clinic self-screening checklist completion (possible future intervention when patient reported outcome measures (PROMs) are in place).

Post-intervention:
Prospective data was collected over a 3-month period following interventions. We managed to improve compliance of DEXA according to BSG from 17% to 63%. We aim to repeat another plan, do, study, act (PDSA) cycle in July 2022 to see if any further improvement can be made.

Conclusion

Compliance with BSG guidance for requesting DEXA in high-risk IBD patients is suboptimal. We have standardised the IBD follow up clinic practice by introducing a pro forma according to BSG guidance. This has shown improved compliance and subsequently better care for the IBD population in Swansea Bay Health Board. ■

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