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AN EVALUATION OF THE IMPACT OF BIOLOGIC THERAPY ON SECONDARY CARE RESOURCE USE ASSOCIATED WITH THE MANAGEMENT OF CROHN'S DISEASE IN THE UK

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Introduction Previous studies with anti-TNF drugs^{1–3} for Crohn's disease (CD) showed a reduction in cost by reducing hospitalisations, examinations under anaesthetic (EUA) and diagnostic procedures. However no study has looked at the effect of anti-TNF drug dosing schedule on outcomes and resource use.

Methods Retrospective study using patient records, in 5 UK hospitals. Consenting patients aged >18 with a diagnosis of CD who had started any anti-TNF drug >1 year prior to study, with records for >2 years pre-anti-TNF were included. Data were collected for 2 years pre-anti-TNF and 1 year post-anti-TNF initiation on hospital resource use associated with CD. Outcomes measured were change in steroid use, rates of surgery and change in disease state at 1 year versus baseline.

Results Of 142 patients in the study (61% female) 121 (85%) started anti-TNF drug in 2005–2009. The prescribing pattern changed from 78% episodic dosing (ED) in 2003 to 79% maintenance dosing (MD) in 2009. Anti-TNF was started a median of 8.7 years (IQR 12.6 years) after diagnosis, with patient median age at initiation 34 years (IQR 18 years).

At 1 year, 77% of patients had improved disease, 12% worse and 11% remained the same. Steroids were stopped in 23% and reduced in 23% at 1 year; more in the MD group (32%) than in the ED group (12%). Rates of major abdominal surgery were similar pre-anti-TNF and post-anti-TNF (0.06 in Y-1 and 0.10 in Y+1). Overall, NHS resource use was similar pre-anti-TNF and post-anti-TNF, for all visit types except day case visits which increased (mean 0.7/year pre vs 5.9/year post) for infliximab infusions. In the MD group there was a NS trend to fewer admissions (mean 0.65/year pre vs 0.42/year post), bed days (4.9 vs 3.6/year), OP visits (7.5 vs 6.4), EUA (1.1 vs 0.8) and A&E visits (0.2 vs 0.1) post-anti-TNF and 72% of MD patients had reduced non-drug direct costs in the post-anti-TNF year.

Conclusion In this study CD of patients treated with anti-TNFs improved and steroid use was reduced, particularly with MD but it did not show the reduction in resource use or major surgery seen in previous work.^{1–3} Results were affected by two very high cost patients, highlighting variability in disease course. Prospective studies are needed to fully explore differences between ED and MD. However, this study suggests that outcomes and costs may be better with MD than ED, supporting latest NICE guidance.⁴

Competing interests JOL, Consultant for Abbott; SB, None declared; PJH, None declared; CH, None declared; FP, Employee of study contractor; KB, Employee of Abbott. Study sponsor, KB Grant/Research Support from Abbott.

Keywords biologic therapy, Crohn's disease.

REFERENCES

1. Jewell DP, et al. *Eur J Gastroenterol Hepatol* 2005;17:1047–52.
2. Lichenstein GR, et al. *Gastroenterology* 2005;128:862–9.
3. Feagan B, et al. *Gastroenterology* 2008;135:1493–9.
4. NICE TA187 May 2010.