Initiation of subcutaneous infliximab (Remsima) therapy for the treatment of inflammatory bowel disease during the COVID-19 pandemic

Promising evidence in the subcutaneous (SC) administration of the infliximab (IFX) biosimilar CT-P13 (Remsima) has emerged in recent years. Furthermore, immunogenicity data have suggested superior steady state therapeutic blood levels of IFX and lower rate of anti-IFX antibodies in a cohort of patients receiving SC Remsima following two intravenous induction doses in contrast to their counterparts who continued to receive intravenous therapy.[1 2] In response to the challenges posed by the COVID-19 pandemic to patients with inflammatory bowel disease (IBD) receiving IFX, we embarked on a patient-partnered programme in switching to SC Remsima. Seventy-five individuals were included in the preliminary service development and some demographics are outlined in table 1. An assessment of patients' attitudes was conducted using a survey.

Table 1 Demographic details of patients undergoing intravenous to subcutaneous infliximab switch

	Number (%)
Total patients	75 (100)
Male	44 (58.7)
Female	31 (41.3)
Crohn's disease	61 (81.3)
Ulcerative colitis	14 (18.7)
Median age	37

Once patients agreed to change to SC Remsima, they were sent information via email, with contact information and a link to an instructional video which can be found here https://www.youtube.com/watch?v=KUaxysZxbU0. From 30 March 2020 to 15 May 2020, 75 patients had received SC Remsima.

Forty-one patients returned surveys before the end of July 2020, representing a 54.7% return. Twenty-five (61.0%) participants clearly indicated feelings of apprehension and anxiety prior to starting SC Remsima, with a majority of respondents countering this by expressing positive outlooks on changing therapy to a SC form. The emergence of the COVID-19 pandemic and measures taken to alter healthcare provision had a major impact on patients' impressions of their treatment. The convenience of avoiding hospital appointments for intravenous infusion therapy and the enhanced control afforded by this therapy were commonly perceived benefits.

The majority of adverse events related to injection site problems like pain and swelling, with at least 12 (29.3%) experiencing such issues. This was the most commonly cited reason for opting to return to intravenous IFX. Besides concerns about injection site issues, suggestions for improvement focused on better interaction between healthcare provider and patient. Clear benefits of attending hospital were espoused by some respondents, from potentially obvious to the team: 'I found the observations done before the IV very useful'; to more unique insights: 'As someone who lives alone there was a 'social' element of hospital attendance'.

Healthcare provider experiences and patient feedback have demonstrated a successful transition from intravenous to SC IFX for the majority. The early identification of pitfalls is essential in achieving a sustainable service of good quality. A patient-centred approach will mean catering also to those who may find it difficult to adapt. As one of the first centres to establish SC Remsima for our IBD patient group, this has been an insightful experience that will

guide better approaches to holistic care in the future.

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