Similar short- and long-term colectomy rates with infliximab and cyclosporine treatment in hospitalized ulcerative colitis patients

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Background

Cyclosporine A (CsA) and infliximab (IFX) are similarly effective in preventing short-term colectomy in patients with moderate to severe ulcerative colitis (UC), but long-term outcomes are scarce. **The aim of this study was to compare long-term efficacy of CsA and IFX in moderate to severe UC by analyzing colectomy rates as outcome parameter for treatment success.**

Methods

We retrospectively studied a cohort of patients who have received treatment with CsA or IFX between January 2000 and April 2014 at the Academic Medical Center in Amsterdam for moderate to severe UC. The primary end point was time to colectomy. Variables such as gender, age, Mayo endoscopic subscore at start of treatment, extent of the disease and concomitant treatments were studied as relevant variables affecting outcome.

Results

A total of 174 patients were studied (42 hospitalized CsA patients, 25 hospitalized IFX patients, and 107 non-hospitalized IFX patients). Follow-up of at least 6 months was available for all patients. Hospitalized patients had comparable patient and disease characteristics (age, gender, and disease duration, extent and severity), with the exception that the mean follow-up was significantly longer in CsA treated patients (months + SD; IFX 53.9 + 34.8 vs CsA 124.9 + 42.0). As can be seen in fig.1, IFX use has increased over time, whereas the prescription rate of CsA has decreased.
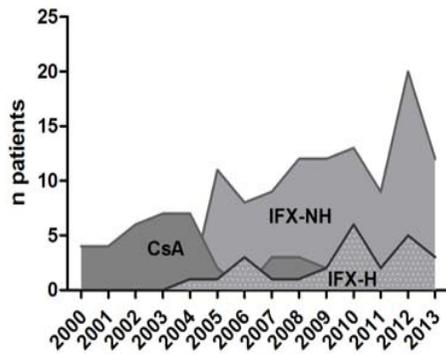

Fig.1

Colectomy rates of hospitalized patients in both groups were not significantly different at all studied time points (see fig. 2). Non-hospitalized IFX-treated patients suffer from less severe disease as indicated by the MAYO endoscopic subscore (p=0.03). Their colectomy rates were lower. Factors that were protective for undergoing colectomy were younger age (HR=0.97 per year; p=0.021) and concomitant thiopurine therapy (HR 0.45; p=0.019).
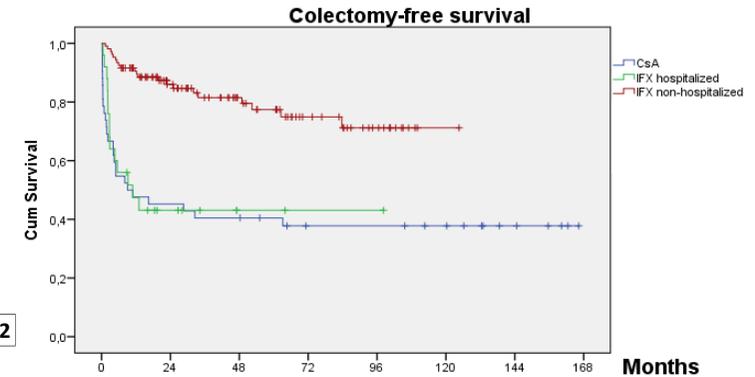

Fig.2

Colectomy rates	1 month	3 months	12 months	36 months
IFX hospitalized	8%	36%	52%	78%
CsA hospitalized	24%	33%	52%	60%
P value (X²) *IFX hospitalized vs. CsA*	n.s.	n.s.	n.s.	n.s.
IFX non-hospitalized	0%	2%	10%	26%
P value (X²) *IFX non-hospitalized vs. all hospitalized pts*	P<0.001	P<0.001	P<0.001	P<0.001

Conclusion

IFX and CsA treatment are similarly effective in preventing colectomy in the short and long term in hospitalized patients that suffer from moderate to severe active UC. In contrast, colectomy rates were lower in patients who received IFX in an ambulant setting.

The risk of undergoing a colectomy was lower in younger patients, and when thiopurines were used concomitantly.
The protective effect of thiopurines was most pronounced in CsA-treated patients.

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