CP-066

INTERLEUKIN-28B POLYMORPHISM AS A PREDICTOR OF RESPONSE TO TELAPREVIR-BASED REGIMENS IN PATIENTS WITH HEPATITIS C VIRUS GENOTYPE 1 INFECTION

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BACKGROUND

Interleukin-28B genetic polymorphism is a key predictor of response to peginterferon-ribavirin treatment in hepatitis C virus (HCV) genotype 1 infection (HCVg1i), CC interleukin-28B genotype (IL28Bg) being highly predictive of efficacy. There is a range of genotypes as well as responses to treatment, for example see the REALIZE study http://www.natap.org/2011/EASL/EASL_17.htm. Main genotypes are IL28Bg CT, CC and TT.

PURPOSE

To assess the role of IL28Bg as a predictor of response in HCVg1i patients treated with telaprevir-based treatment.

MATERIALS AND METHODS

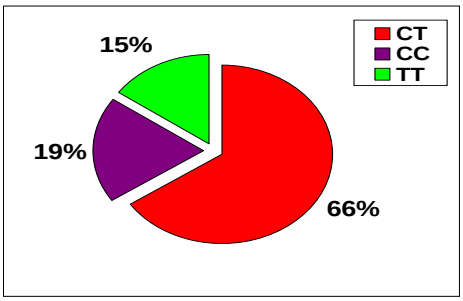
Retrospective study of patients treated with peginterferon-ribavirin-telaprevir. Demographic and pathological data, response at 4 and 12 weeks (HCV-RNA<1000) and at 24, 36, 48 weeks of treatment (HCV-RNA undetectable), sustained virological response 12 weeks after treatment (SVR12), adverse effects and discontinuation were collected in an Access database and analyzed with SPSS vs12.

RESULTS

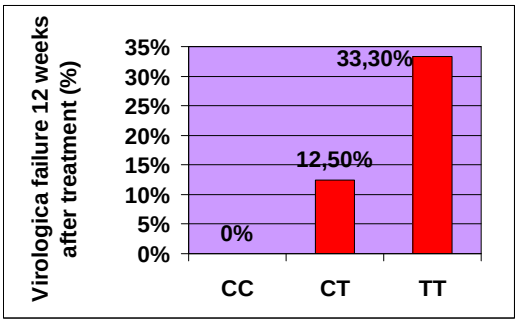
73 patients (53 male), median age of 51 (34-76) years, 63,4% genotype 1b, 87,7% mono-infected, 68,5% pretreated (mainly relapsers 60%), and 56,2% fibrosis F3-F4. The distribution of IL28Bg is in Picture 1.32.9% discontinued treatment.

Among IL28Bg groups no significative difference was found either in baseline data or in response at 4,12, 24, 36 and 48 weeks of treatment and SVR1, but it was observed lower response in TT in week 36 and 48 (85,7% versus 100% in CT and CC) and lower SVR12 (picture 2).

There was no difference in cutaneous rash or anaemia (haemoglobin level <10 g/dL) . Within each group, discontinuation was higher in CT (35,4%) and CC (35,7%) being mainly due to virological failure (52,9%) and adverse effects (60%), respectively.



Picture 1. IL28B genotype distribution



Picture 2. Virological failure 12 weeks after treatment (%) in each IL28B genotype group

CONCLUSIONS

IL28Bg seemed to show a very good SVR12 in the CC group, an increase in virological failure being observed in CT and TT. Published studies suggest that IL-28Bg is a predictor of SVR in patients with chronic HCV treated with triple therapy[1], but in relapsers the impact is limited, achieving an improvement in all IL28Bg[2]. In our study SVR12 might be influenced by IL28Bg. Further SVR data is needed.

REFERENCES

1. Clin Drug Investig. 2013 May;33(5):325-31.
2. J Hepatol. 2013 May;58(5):883-9.

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