The efficacy of tacrolimus as an alternative agent in the treatment of autoimmune hepatitis.

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Introduction

Autoimmune hepatitis (AIH) is a chronic, inflammatory liver condition which, if untreated, can result in liver cirrhosis. Current BSG guidelines recommend corticosteroids and azathioprine as first line therapy, with the option of switching to mycophenolate if azathioprine is not tolerated. Tacrolimus has been identified as a potential third line treatment strategy.

Aim

Our aim was to review the outcomes of patients with a diagnosis of AIH who required the addition of tacrolimus as a third line agent.

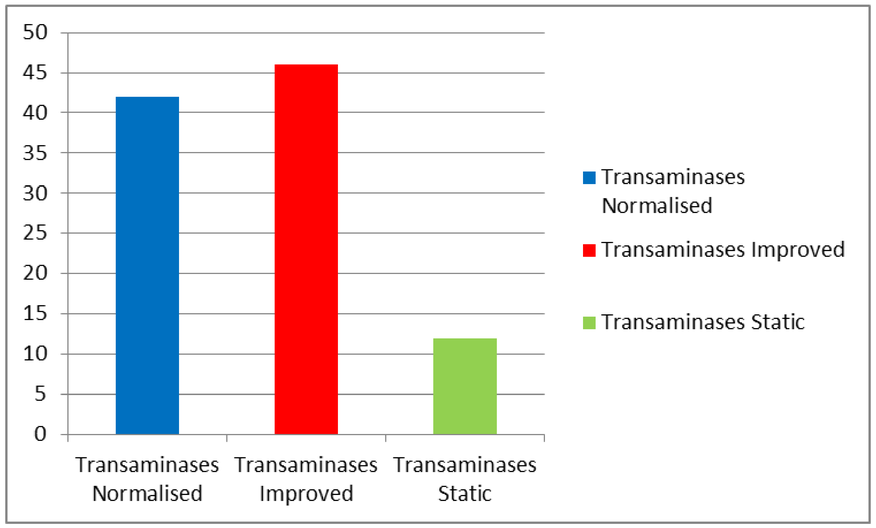
Method

The tacrolimus database for the Regional Liver Unit, Royal Victoria Hospital was reviewed to identify all patients with AIH who had been treated with tacrolimus from Jan 2010 until August 2017. Records were cross referenced with the diagnostic coding department. Demographic details, indications for tacrolimus therapy, clinical and biochemical outcomes were recorded.

Results

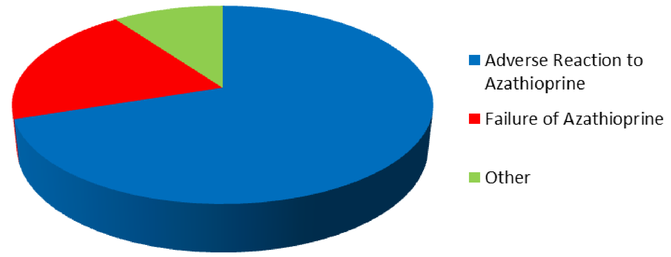
30 patients were identified (24 (80%) female, mean age 40.7 years, range 19-81 years). 27 of the 30 patients were initially treated with azathioprine of whom 21 (78%) discontinued treatment due to adverse effects including blood dyscrasias and 6 (22%) were switched to tacrolimus due treatment failure. Three of 30 patients were started on tacrolimus as initial therapy instead of azathioprine or mycophenolate. Two of these patients had previous episodes of pancytopenia at the time of commencing treatment for AIH and so azathioprine/mycophenolate were excluded as a treatment option. One of the patients was commenced on prednisolone and tacrolimus without another steroid sparing agent being trailled, for other reasons.

26 (87%) of 30 patients remain on tacrolimus. Of these 26 patients, 11 (42%) had normalisation of transaminases and a further 12 (46%) had improvement of transaminases. Liver function tests in the 3 (12%) remaining patients were deranged but static. Of note all three had established cirrhosis at the time of AIH diagnosis. Of the four whose tacrolimus therapy was discontinued, two stopped due to side effects, 1 is deceased (not tacrolimus related) and one stopped due to commencing infliximab for IBD.



Outcomes for patients on tacrolimus therapy as a percentage.

Reasons for commencing Tacrolimus therapy



Conclusion

Tacrolimus is a safe and well tolerated treatment for AIH when first line therapy has failed. In the cohort observed, only 6% failed to tolerate tacrolimus and biochemical parameters were improved or normalised in 88% of patients who remained on tacrolimus therapy.

References

BSG guidelines for the management of autoimmune hepatitis .

D Gleeson, M.A. Heneghan