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SHC 49 . CYP2C9 ACTIVITY IN ANKYLOSING SPONDYLITIS PATIENTS TREATED WITH TUMOR NECROSIS FACTOR-ALPHA (TNFα) BLOCKERS

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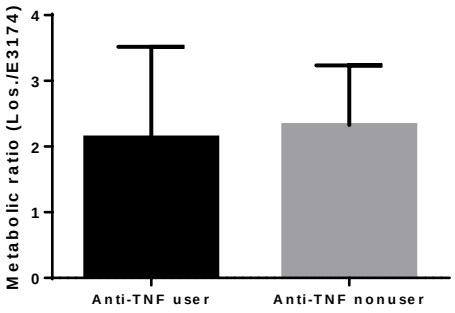
Ankylosing spondylitis (AS) is a chronic inflammatory disease. AS is mainly characterized by inflammation, especially increase of the proinflammatory cytokines such as, TNF-α, IL-6, IL-17 and IL-23. Tumor necrosis factor-alpha (TNFα) blockers, for example, etanercept, infliximab, golimumab and adalimumab are used for the treatment of AS. In a previous study, we found that CYP2C9 enzyme activity was lower in AS patients compared to the healthy volunteers. This work purposes to compare the phenotype of CYP2C9 in Anti-TNF user and non-user AS patients.

A total of 32 patients with AS (11 Anti-TNF user, 21 non-users) were recruited in the study. A single 50 mg losartan was given to the participants and 8-hr urine was collected overnight. Then, the urinary concentrations of losartan and its metabolite, E3174, were measured by high-pressure liquid chromatography. Urinary losartan/E3174 metabolic ratio was used as an index of CYP2C9 enzyme activity. Differences in the metabolic ratio of losartan was compared with Mann–Whitney U test.

The mean values of losartan metabolic ratio were 2.14 and 2.33 in Anti-TNF user and non-user AS patients (p=0.51, median and 95% CI: 1.27 [0.92-3.35] and 1.84 [1.48-3.18], respectively).



CYP2C9 enzyme activity was similar in Anti-TNF user and non-user, therefore anti-TNF drugs do not seem to interact with CYP2C9 substrates.

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