

A prospective study in hepatitis C virus treatment-naïve patients showing rheumatologic extra-hepatic manifestations of hepatitis C with associated risk factors: efficacy and safety using sofosbuvir-based direct antiviral therapy

Background: To study the most common rheumatologic manifestations of hepatitis C viral (HCV) infection in Egyptian patients and associated risk factors with assessment the effect of current therapies on these manifestations. A prospective study was carried out to HCV patients attending the tropical medicine department referred to rheumatology department, over a year. A total of 204 hepatitis C virus treatment-naïve patients aged 21–71 years old suffering from rheumatologic manifestations were recruited, and history taking, general and musculoskeletal examination, laboratory and serological investigations, imaging, and liver fibrosis findings were assessed: baseline, end of treatment, and 12 weeks later, either sofosbuvir/ribavirin or sofosbuvir/simeprevir regimens and through three consecutive visits: joint activity and functional scores were taken. Results: Common observed rheumatologic manifestations were fibromyalgia (74.5%), arthralgia (73.5%), Raynaud's phenomenon (54.9%), peripheral neuropathy (29.4%), chronic fatigue syndrome and purpura (24.5%), arthritis (16.7%), Sicca symptoms and skin ulcers (9.8%), and vasculitic CNS involvement (5.9%), mostly seen in females. VAS and FAS scales have improved across visits (p value < 0.001) with lowered number and percentage of arthralgia (tender joint counts), arthritis (swollen joint counts), improvement of fibromyalgia, purpura, peripheral neuropathy, anemia, and thrombocytopenia (p < 0.001). Common reported risk factors were barber shaving (52 %), dental procedures (44.1%), and surgical interventions (36.3%). Non-reactive cases shown by HCV-PCR response increased at the end of study reaching 62%. The percent of improvement was significantly higher in patients receiving sofosbuvir/simeprevir regimen (100%) versus sofosbuvir/ribavirin (58.2%). Conclusion: Direct antiviral drugs seem to improve the rheumatic extra-hepatic manifestations of HCV patients and lowering viremia level especially sofosbuvir/simeprevir regimen in hepatitis C treatment-naïve patients.