



EXPRESSION OF THE PROTEIN 2'5' OAS IN PATIENTS WITH HEPATITIS C VIRUS RESPONDERS TO INTERFERON α PLUS RIBAVIRIN TREATMENT

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Introduction. Hepatitis C virus (HCV) is a public health problem of global importance, the latest estimate of OMS is 180 million people infected worldwide. Nowadays the FDA approved treatment with interferon α plus ribavirin. Interferons have three types of biological effects, one of them is the antiviral effect, it induces the transcription and translation of more than 300 genes among which include 2'5' OAS².

The aim of this study was to determine the protein expression 2'5' OAS in patients with hepatitis C virus responders and no responders to interferon α plus ribavirin.

Methods. In this pilot study, 18 patients infected with HCV were involved and they provided a blood sample at the 2nd, 5th, 8th and 12th week of treatment, to which lymphocytes were extracted to identify the protein 2'5' OAS.

Results. A polyacrylamide gel at 12% of concentration was stained with Coomassie blue, which demonstrates that the 2'5' OAS protein shows two bands of about 70 and 115 KD (Fig. 1).

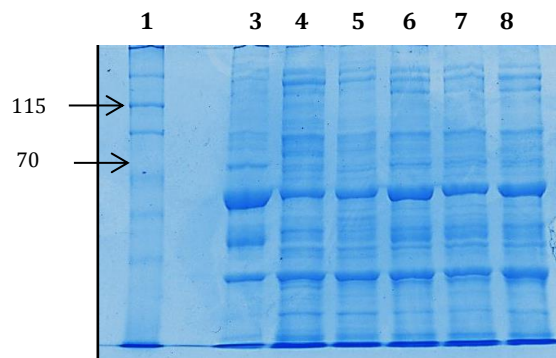


Figure 1. Protein electrophoresis in 12% polyacrylamide gel. Lane 1 Molecular weight marker. Lanes 3, 4, 5, 6, 7, 8 Protein samples. The arrows indicate that the protein of interest may be found here.

The Western Blot technique was standardized using as first OAS Ab at a 1:500 dilution and the second one using anti-rabbit Ab at a 1:200 dilution. Once the concentration of polyacrylamide gel and Western blotting were standardized, the sample of a patient with 8 weeks of treatment was quantified. The first OAS Ab diluted at 1:500 and 1:200 were added to the membrane. The second one used was anti-rabbit Ab, marked with HRP at a dilution of 1:2000, finally proteins were revealed with luminol (Fig. 2).

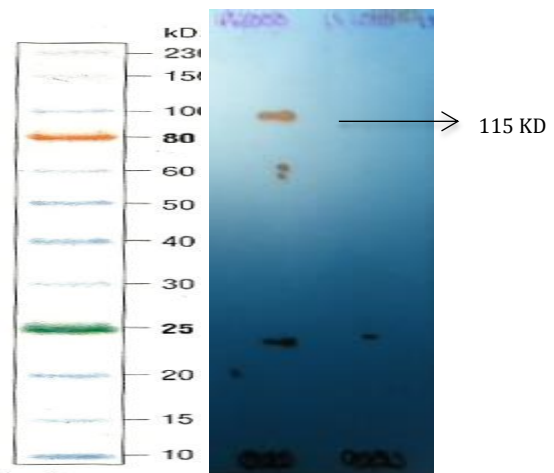


Figure 2. Protein band corresponding to the 2'5' OAS 115 KD 1er Ab dilutions of 1:200 and 1:500. 2nd Ab at 1:2000.

Conclusions. The presence of the protein 2'5' OAS in the eighth week of treatment was observed.

References.

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