

## HCV-induced increase in alpha-fetoprotein without hepatocarcinoma



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### ABSTRACT

Hepatitis C Virus (HCV) infection is chronic and is still an important cause of liver cirrhosis. In patients with chronic hepatic dysfunction, the risk of developing hepatocarcinoma is 1 to 5% per year, and may be higher in patients with other risk factors, such as alcoholism and HIV co-infection.

**Keywords:** Hepatocarcinoma, Hepatitis, Antiviral.

## 1 INTRODUCTION

Hepatitis C Virus (HCV) infection is chronic and is still an important cause of liver cirrhosis. In patients with chronic hepatic dysfunction, the risk of developing hepatocarcinoma is 1 to 5% per year, and may be higher in patients with other risk factors, such as alcoholism and HIV co-infection.

## 2 OBJECTIVE

Due to the high risk of hepatocarcinoma, patients with HCV cirrhosis are periodically screened for cancer with imaging tests and alpha-fetoprotein levels. In the presence of a hepatic lesion and the previously described marker elevated (especially with values above 200 ng/ml), hepatocarcinoma is suspected. The present study presents a case report demonstrating the above-mentioned alterations induced only by HCV activity, without neoplasia. The diagnosis of this condition allows antiviral treatment to be carried out, and improvement of the patient's findings and morbidity and mortality.

Materials and Methods: case report of a patient under infectious disease outpatient follow-up, after informed consent. Information was collected through a review of medical records.

## 3 RESULTS

Trans woman, 49 years old, smoker, HIV-HCV co-infection (genotype 1a, 1,684,657 IU/ml, log 6.23), liver cirrhosis Child B. Undetectable HIV viral load, on regular use of antiretrovirals. During

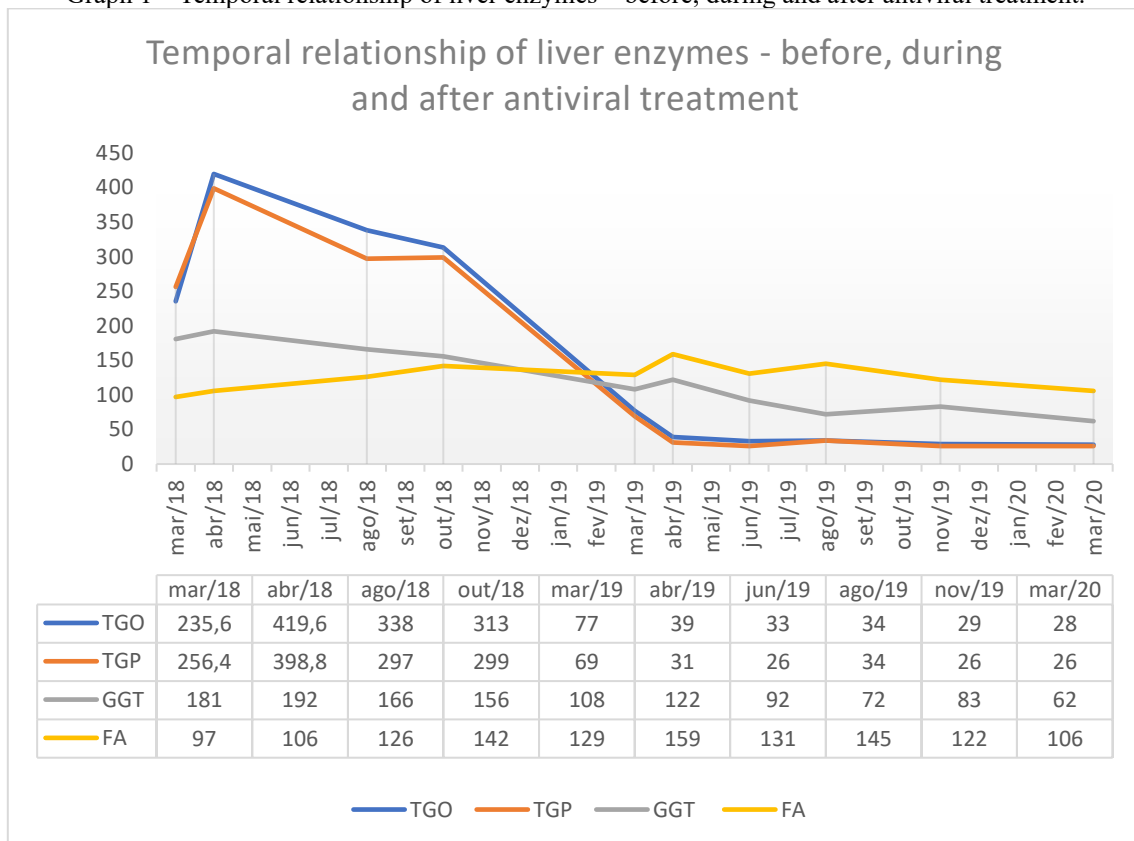


outpatient follow-up, alpha-fetoprotein of 309 ng/ml (reference value up to 5.8) was observed, and ultrasonography of the abdomen showed liver disease without lesions. The patient underwent abdominal MRI with a nonspecific infiltrative lesion in the left hepatic lobe. Liver biopsy was performed, directed by imaging test, revealing cirrhosis, METAVIR F4/A2, with no evidence of neoplasia. The patient underwent treatment with ribavirin + sofosbuvir + daclatasvir for six months (between October 2018 and March 2019), without interurrences. There was an improvement in hepatic parameters (as shown in the graphs and table below), in addition to a progressive decrease in alpha-fetoprotein. A new MRI of the abdomen after the treatment showed the disappearance of the previously mentioned image. HCV viral load after six months of treatment, undetectable, confirming sustained virologic response.

#### 4 CONCLUSION

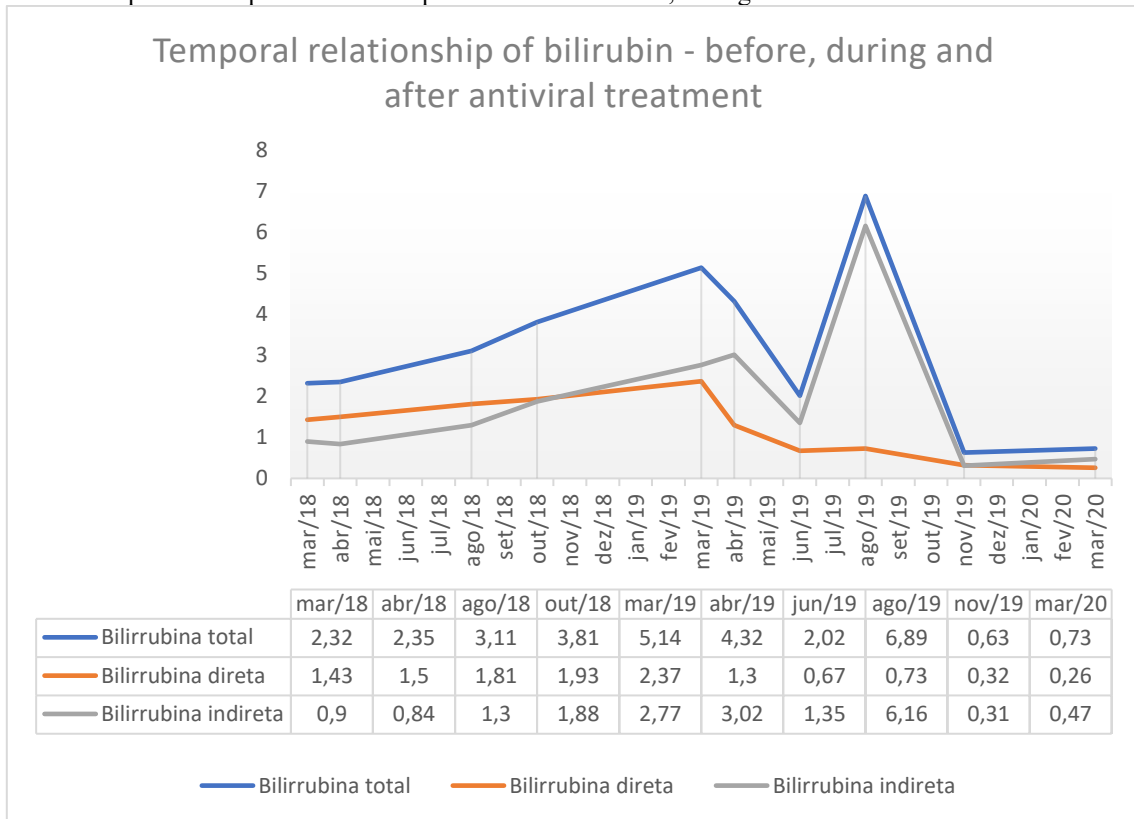
In view of atypical findings, such as the lesion described above, it is important that the investigation be performed in a timely manner. Thus, the diagnosis is instituted, and the appropriate treatment for the case is possible.

Graph 1 – Temporal relationship of liver enzymes – before, during and after antiviral treatment.





Graph 2 – Temporal relationship of bilirubins – before, during and after antiviral treatment.



Graph 3 – Evolution of tumor markers during the evaluation period.

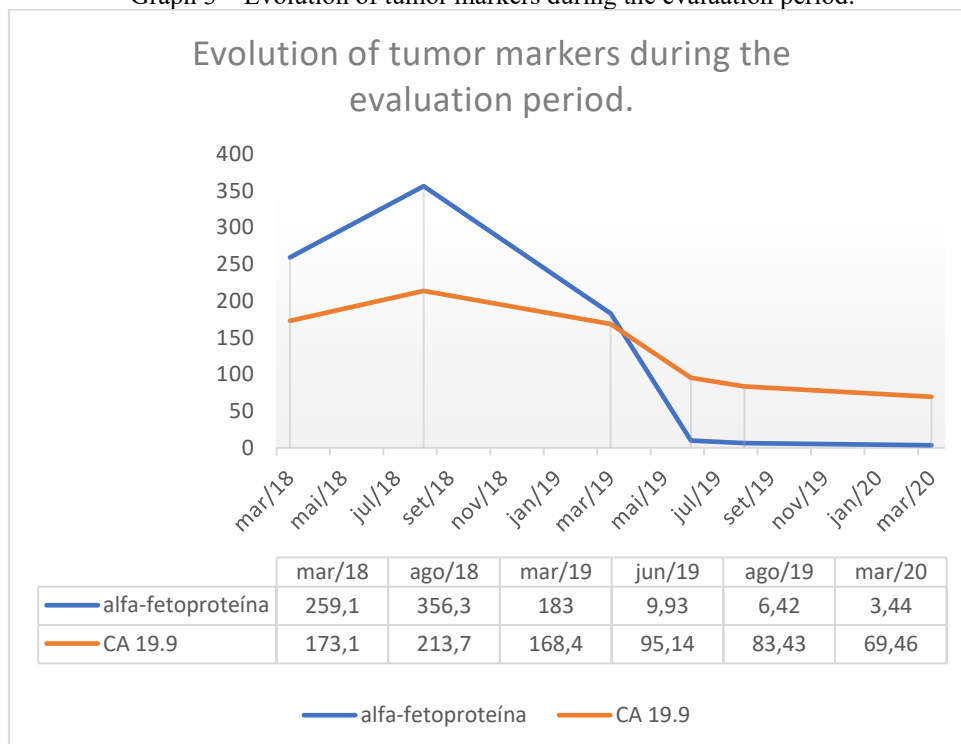




Table 1 – Evolution of the other parameters during the evaluation period. Note the improvement of the parameters after treatment.

	<b>Platelets</b>	<b>RNI</b>	<b>albumina</b>
<i>Mar/18</i>	75 thousand	1,27	3,46
<i>ago/18</i>	88 thousand	1,21	4,09
<i>out/18</i>	84 thousand	1,13	
<i>Mar/19</i>	120 thousand	1,19	4,07
<i>Apr/19</i>	105 thousand	1,14	4,61
<i>jun/19</i>	90 thousand	1,14	4,15
<i>ago/19</i>	104 thousand	1,05	4,57
<i>Mar/20</i>	122 thousand	1,02	5,01



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