THE ECOGRAPHIC MONITORIZATION OF THE THYROID GLAND DIMENSIONS AT THE PATIENTS WITH ACTIVE CHRONIC HEPATITIS WITH HVC AND HVB AT THE BEGINNING AND AFTER THE THERAPY WITH PEGINTERFERON α 2A

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Abstract: Objective: The objective of this paper was the ecographic monitorisation of the thyroid gland dimension at the patients with active chronic hepatitis with HVC and HVB during the treatment with Peginterferon α 2A 180μg. Methods: The clinical study was efectuated on a lot of 45 patients, aged between 18 – 65 years, from which 25 patients with active chronic hepatitis with HVC and 20 patients with active chronic hepatitis with HVB. The distribution on sex comprised in the lote of active chronic hepatitis with HVC 15 female patients and 10 male patients and in the lote of those with active chronic hepatitis with HVB 11 female patients and 9 male patients. The dimension of the thyroid gland was established ecographically at the beginning and in the end of the therapy with Peginterferon α 2A. It has been established a medium volume of the thyroid gland for every category of the fourth categories of patients at the beginninging and at the re-evaluation. The status of the patient regarding the thyroid dysfunction before the beginning of the treatment wasn’t taken into consideration. The patients were selected from the clinic and the ambulatory of the Clinic and Emergency Hospital of Sibiu. In the study there weren't included the patients that at the beginning of the treatment presented thyroid dysfunction. The evaluation also excluded the patients with a thyroid pathology set up during therapy. Results: The result of the determinations was a medium significant increase with percents comprised between 11 – 20 % secondary the therapy with Interferon. Conclusion: The female patients with chronic active hepatitis with HVC presented a percentage difference between the volumes of the thyroid gland at the beginning and after treatment increased in contrast with the female patients with chronic active hepatitis with HVB. For the male patients the percentage difference between the volumes of the thyroid gland was increased in the case of patients with active chronic hepatitis with HVB in contrast with the patients with chronic active hepatitis with HVC.

Keywords: Interferon αμ; thyroid gland; chronic viral hepatitis HVC; chronic viral hepatitis HVB

Cuvinte cheie: Interferon αμ; glanda tiroidă; hepatită cronică virală VHB; hepatită cronică virală VHC


THE AIM OF THE STUDY

The objective of this paper was the ecographic monitorisation of the thyroid gland dimension at the patients with active chronic hepatitis with HVC and HVB during the treatment with Peginterferon α 2A 180μg.

MATERIAL AND METHOD

The clinical study was efectuated on a lot of 45 patients, aged between 18 – 65 years, from which 25 patients with active chronic hepatitis with HVC and 20 patients with active chronic hepatitis with HVB. The distribution on sex comprised 15 female patients and 10 male patients in the group of those with active chronic hepatitis with HVC and 11 female patients and 9 male patients in the group of those with active chronic hepatitis with HVB.
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The dimension of the thyroid gland was established ecographically at the beginning and in the end of the therapy with Peginterferon α 2A. It has been established a medium volume of the thyroid gland for every category of the fourth categories of patients at the beggining and at the re-evaluation.

The status of the patient regarding the thyroid dysfunction before the beginning of the treatment wasn’t taken into consideration.

The patients were selected from the clinic and the ambulatory of the Clinic and Emergency Hospital of Sibiu. In the study there weren’t included the patients that at the beginning of the treatment presented thyroid dysfunction. The evaluation also excluded the patients with a thyroid pathology set up during therapy.

**RESULTS AND DISCUSSION**

The result of the determinations was a medium significant increase with percents comprised between 11 - 20 % secondary the therapy with Interferon.

The volume modifications were as it follows in the case of the active chronic hepatitis with HCV, the percentage difference between the volumes was of 20% in the case of the 15 female patients, the medium volume of the thyroid gland being of 7,5 cm³ at the begging and of 9 cm³ after treatment. For the male, the percentage difference between volumes was of 11%, 10 male patients having a medium volume of the thyroid gland of 10,5 cm³ at the begging of the treatment and of 11,6 cm³ after treatment.

In the case of the chronic active hepatitis with HBV, the percentage difference between volumes was of 18% in the case of the 11 females patients, the medium volume of the thyroid gland being of 7,7 cm³ at the begging and of 9,08 cm³ after treatment. For the males, the percentage difference between volumes was of 14,5%, and the 9 male patients having a medium volume of the thyroid gland of 10,3 cm³ at the begging of the treatment and of 11,08 cm³ after treatment.

The result of the analysis was a medium meaningful increase with percents included between 11 - 20 % secondary the Interferon therapy.

Our study revealed the correlation between the thyroid gland volume and the duration of the treatment with Peginterferon α 2A. We have noticed a meaningful increase of the thyroid gland during the treatment. This modification is determined most probably to the irregularity of the synthesis or of the releasing way of the thyroid hormones. A pursue on long term of these patients makes obvious the apparition of the thyroid nodules. The physical examination is less sensitive in comparison with the volume of the thyroid gland suggested by the ultrasound.

The thyroid echogenicity of the patients decreased significantly after treatment, so we may conclude that the Peginterferon α 2A determines not only functional turmoil but also the apparition of the thyroid hypoechogenicity, suggesting relevant modifications of the morphology of the thyroid gland. With the help of the Doppler ecography, it was possible the differentiation between the destructive thyroiditis and the Graves disease. It was observed a reduction of the echogenicity, suggestive for a destructive process of the thyroid gland, even before the modifications of the thyroid function given by the level of the antithyroid antibodies. The risk factors for the developing of the thyroid dysfunction were the age, the feminine sex, the increased volume of the thyroid gland before the initiation of the treatment.

The ecography represents a complementary simple tool for the screening and pursuing during the period of the antiviral treatment, useful in the differentiation between the common types of hyperthyroidism, offering an image on the morphological modifications of the thyroid gland during the antiviral treatment.

**CONCLUSIONS**

The female patients with chronic active hepatitis with HVC presented a percentage difference between the volumes of the thyroid gland at the begging and after treatment increased in contrast with the female patients with chronic active hepatitis with HVB.

For the male patients the percentage difference between the volumes of the thyroid gland was increased in the case of patients with active chronic hepatitis with HVB in contrast with the patients with chronic active hepatitis with HVC.

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