

Case Report

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The Risk of Breast Carcinoma with Interferon Plus Ribavirin Therapy during Treatment of Chronic Hepatitis C Virus Infection-A Case Report

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Objective

The main objective of this clinical case presentation is to attract attention about the risk of therapy with interferon and ribavirin.

The risk of therapy with interferon and Ribavirin has been reported, such as: dominated by fatigue, influenza-like symptoms, hematologic abnormalities, and neuropsychiatric symptoms [1,2], but the risk of breast carcinoma of therapy with interferon and Ribavirin has not been seen.

Materials and Methods

I present the clinical case of a women patient 44 years old, which came at consultation for asthenia, after follow a diet for weight loss. The objective examination was in normal limits except the presence of the hepatomegaly at 1, 5 cm under the last rib, with regular border, increase consistence, regular surface, without pain in time of palpation. The laboratory examination showed: ALT=48 UI/l, ALP=56 UI/l, total bilirubin=1.8 mg/dL, indirect bilirubin=1.5 mg/dL, direct(conjugated) bilirubin=0.3 mg/dL, GammaGT=58 IU/L, FA=36 UI/L, serum

protein=7.2 g/100ml, serum protein electrophoresis albumin=28% α_1 =4% α_2 =6% β =10% γ =21%, serum immunoglobulin levels: IgG=720 mg/100 ml, IgM =96 g/100 ml, IgA=90 mg/100 ml, TS=1,2s, TC=1,4s. After I performed viral markers appeared Anti-HCV positive, Hepatitis B virus (HBV) negative, Anti-mitochondrial antibodies negative, viremia=5 000 000IU/ml. In this moment was established the diagnosis active chronic virally C hepatitis positive. Abdominal eco confirmed hepatomegaly with increased echogenity and normal portal vein=11mm.After that the patient performed needle hepatic biopsy which showed the histopathology diagnosis of "peace meal necrosis" (Figure 1).

It is important to note the discordance between the level of the liver enzymes (ALT=48 UI/l, ALP=56 UI/l) no very increase and the very severe active lesions, at the histopathology examination after needle biopsy of the liver, fulminate necrotic liver disease with "peace meal necrosis". The levels of enzyme livers no was at double level but because the result after needle liver biopsy was so severe and viremia at so increase values, the patient start therapy with a interferon. After this result the patient follow the standard protocol of therapy with a Interferon 6 MU 3X/week three month but without response after therapy. The level of liver enzymes remain at the same value, Anti-HCV maintain positive, only viremia decrease to 3 000 000IU/ml level. For this reason the patient follow the therapy protocol with a Interferon

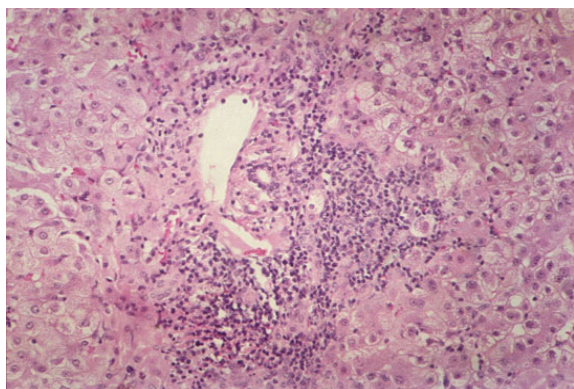


Figure 1: Histopathology examination of liver-HE-stain-Peace meal necrosis.

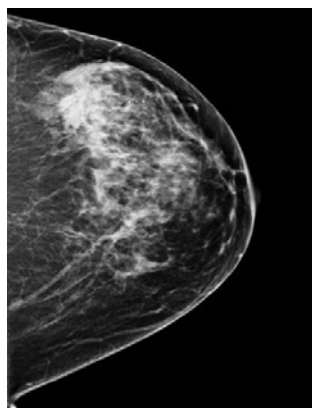


Figure 2a: Mammography of left breast-irregular tumor formation.

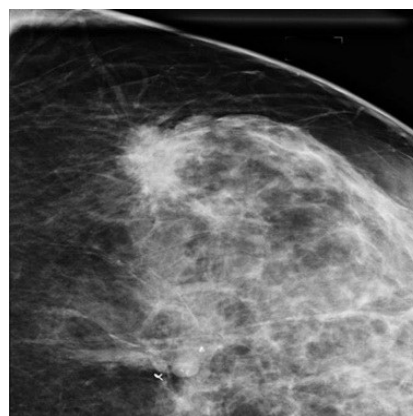


Figure 2b: Mammography of left breast-irregular tumor formation-view image.

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Received March 22, 2013; Accepted May 23, 2013; Published May 27, 2013

Citation: Stoicescu M (2013) The Risk of Breast Carcinoma with Interferon Plus Ribavirin Therapy during Treatment of Chronic Hepatitis C Virus Infection-A Case Report. J Develop Drugs. 2: 102. doi:10.4172/2329-6631.1000102

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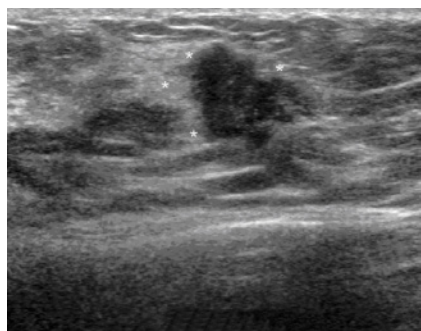


Figure 3: Breast echo Doppler—irregular tumor formation with increase vascular flux at Doppler examination.

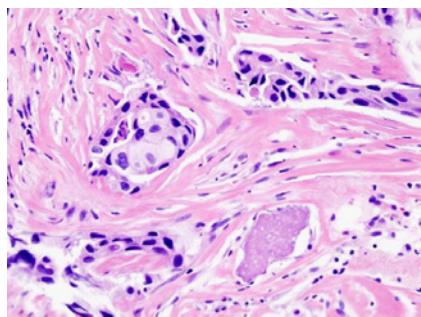


Figure 4: Histopathology examination HE stain Breast invasive scirrhous carcinoma.

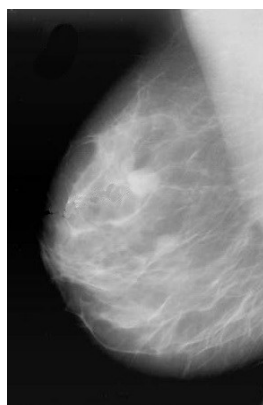


Figure 5: Normal mammography.

6MU 3X/week and Ribavirin 1000 mg/day six weeks with decreased viremia=1 000 000IU/ml, normalization of liver enzymes and persisted Anti-HCV positive. After that follow diet and liver protect medication with Silimarin 3x1 pills/day and Essential 3x1 pills-day.

In approximate 6 month after follow the standard protocol with α Interferon and Ribavirin the patient present appearance of a tumor formation 2.5/3.5 cm with irregular border, hard, with low mobility at the level of left breast which later was confirmed after performed mammography (Figure 2a and 2b), breast eco Doppler (Figure 3) and needle breast biopsy with histopathology examination as a breast carcinoma (Figure 4).

The patient was performed Halsted surgical intervention with

tumor formation resection and lymph nodes extirpation of left axial side, radiotherapy and chemotherapy with favorable evolution. I mention that the patient not presented per heredity line cases of carcinoma of the breast and she made a screening mammography (Figure 5) before discover the virus C positive and before start the therapy with interferon and was normal.

Another unusual event which happened with this patient was the next episode. Before the therapy with Interferon and Ribavirin the patient presented the clinical aspect of a right basal pneumonia. She made the allergic test of Penicillin G and was negative and she follows therapy with Penicillin G 2x2 milions i.m. 10 days with favorable evolution and complete resolved of the pneumonia. After she made complete protocol of therapy for virus C with Interferon and Ribavirin, the patient presented again the clinical symptoms and signs of pneumonia and after made again allergic test of Penicillin G development anaphylactic shock for which immediately was necessary emergency therapy with adrenalin 0.05 ml/kg of 1:10000 i.v. and hydrocortisone 300 mg i.v. with remittance the symptoms and save the patient life. This cannot make the therapy with Penicillin G again for pneumonia which anterior this protocol of therapy was made without any problem.

The interferon can cause auto-antibodies and autoimmune disorders, so it is possible that therapy with interferon and Ribavirin to appear change in autoimmune system of the body.

Results and Discussion

It is possible that therapy with interferon and ribavirin to have cancer risk which we don't now actually in present. Also is possible to appear change in autoimmune system of the body to modify the reaction of the body at different drugs, such as Penicillin G in situation presented before.

Conclusion

The women patients after standard protocol with Interferon and Ribavirin must to be screening follow by mammography for early discover of the breast cancer and reported also other cases, which probably will be contraindicated in the future this routine therapy used in present for therapy of the patients with C and B virus positive.

Also we must to be carefully at the reaction of the drugs after this therapy because the patients is possible to develop very severe allergic reactions and put in dangerous they life. I think in this moment we don't know all dangerous side effects of this therapy with Interferon and Ribavirin and in the future are possible to be change with other drugs. The risks of side effects comparative with benefits must to be seriously taken in to account.

References

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