

## The dynamic evaluation and efficacy of ultra-high sensitivity chromosomal instability detection in liver cancer treatment

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**Keywords:** Liver cancer; Ultra-high sensitivity chromosome; Instability test; Dynamic assessment; healing efficacy

**Abstract: Purpose:** To analyze the dynamic evaluation and efficacy of ultra-high sensitivity chromosome instability detection in liver cancer treatment. **Method:** Randomly selected 72 patients with liver cancer from September 20 to May 2019 in our hospital and through various chemical methods, we have come to understand the expression of MSI and mutant P53 protein in chromosome 17P of patients with liver cancer. **Outcome:** It can be seen from the experiment that there is no difference between the MSI and the patient's gender ( $P>0.05$ ). For the sudden P53 protein expression, there is no significant difference in each age of onset ( $P>0.05$ ), but AFP is positive, because the positive expression rate of hepatoma mutant P53 protein was significantly higher than that of AFP negative liver cancer ( $P<0.05$ ) and there was no significant difference between the expression of positive liver cancer mutant protein and negative ( $P>0.05$ ), and there was also no comparability. **Conclusion:** There is no correlation between MSI and the pathogenesis of most HCC. The carcinogenic mechanism of P53 gene mutation in HCC does not pass the path of MSI pathology of the expression of P53 gene mutation will be different, and the difference in expression will be closely related to carcinogenic factors, so people should also gradually increase their research efforts to promote the treatment of the disease.

### 1. Introduction

Gene instability can be divided into two forms, the so-called chromosomal instability, it can also be called the tumor suppressor pathway and microsatellite instability which many primary hepatocarcinomas do not pass the tumor inhibition pathway and there are many chromosome fragments lost<sup>[1]</sup>. The picture of P53 gene plays an important role in the occurrence of liver cancer. However, people should increase the research intensity and study the laws of various chromosomes in depth, but the relationship with P53 expression has not been deeply studied, the final research results should have Scientific and normative trends, at present, 72 patients with liver cancer from September 20 to May 2019 in our hospital that were randomly selected for the experiment, report are as follows.

### 2. Method and materials

#### 2.1 Common materials

72 patients with the liver cancer were randomly selected from the hospital in September 20 to May 2019, including 40 males and 32 females, aged (29-68) years old, mean age ( $40.6\pm 2.8$ ) years old age and there was no statistically significant difference in the general data of gender ( $P>0.05$ ), but comparably the family agreed that the patient participated in the study. At the same time, the patient was able to understand the specific process of the experiment and signed the consent form while the experiment was supervised by the ethics committee of the hospital.

#### 2.2 Method

When the patient's tumor is cut off, the normal and abnormal tissues are fully classified and collected which the various necrotic tissues were separated, and the extracted tissues were

cryopreserved in the refrigerator before DNA extraction was performed, while the normal and the abnormal tissues were divided into 20 pieces and the staining process was carried out on one piece and the microscope distinguishes the cancer tissue from the normal tissue based on a thorough analysis of the film, the medical staff selects normal and abnormal tissues for the unstained film, and there are numerous cancer cells in the liver cancer tissue while the DNA is extracted by a novel technique, afterward proceed to the analysis of MSA.

### 2.3 Judging criteria

P53 antibody was purchased from Datong Enterprise and the PBS was the control tissue while the conventional serum became the replacement control, the liver tissue of healthy people became the normal control, and the liver cancer tissue will have some DNA, if the position of the electrophoresis band moved, for MSI, some particles are produced in the nucleus and around, which can be judged as positive [2].

### 2.4 Statistical method

Spss22.0 software to calculate the various data in this experiment and use x2 to test the data, when  $p < 0.05$ , the difference is considered statistically significant.

## 3. Summary

### 3.1 The relationship between MSI and mutant P53 protein expression and clinical parameters in hepatocellular carcinoma

According to the experiment, it can be seen from the experiment that there is no difference between the MSI and the patient's gender ( $P > 0.05$ ). For the sudden P53 protein expression, there is no significant difference in the age of each onset ( $P > 0.05$ ). However, the positive expression rate of AFP-positive liver cancer mutant P53 protein was significantly higher than that of AFP-negative liver cancer ( $P < 0.05$ ). There was also no significant difference between the expression of positive liver cancer mutant protein and negative ( $P > 0.05$ ), and there was no comparability as well.

Table 1 The relationship between MSI and mutant P53 protein expression and clinical parameters in hepatocellular carcinoma.

Parameter		n	MSI+	Mutab <sup>t</sup> P53 expression
Age	>40	61	1	14
	<40	11	1	3
Sex	Male	64	3	14
	Female	8	0	3
Cirrhosis	Positive	59	4	15
	Negative	13	1	2
HBsAg	Positive	57	4	13
	Negative	15	1	3
AFP	Positive	36	3	16
	Negative	36	3	5
X2	-	9.083	10.271	11.262
p	-	0.009	0.106	0.471

Relationship between 2.2M SI and sudden P53 protein expression in the Liver cancer patients were divided into positive and negative, and the protein positive rate of positive tissues was not significantly different from MSI negative liver cancer ( $P > 0.05$ ), and it was not comparable.

Table 2 The relationship between MSI and sudden P53 protein expression

	Number of cases	Mutant p53 expression
MSI positive	5	1
MSI negative	67	19
X2	9.092	10.471
P	0.09	0.14

#### 4. Deliberations

There is a close relationship between malignant transformation of cells and genomic instability, the results of MSI in HCC are quite different which may be related to racial differences, the difference in detection sites and numbers will also have a huge correlation. In addition, the case selection specimens are also important influencing factors, whether cirrhosis is related to viral infection, the people's research efforts should be gradually increased through the experiments, which can be known from the experiments that there is no difference between MSI and patient gender. ( $P>0.05$ ), because there was no significant difference in the expression of sudden P53 protein in each age of onset ( $P>0.05$ ), but the positive expression rate of AFP positive liver cancer mutant P53 protein was significantly higher than AFP negative liver cancer of ( $P<0.05$ ). There was also no significant difference between the expression of positive liver cancer mutant protein and negative ( $P>0.05$ ), and there was no comparability as well. So each of the condition has a latent stage and people should face up to the symptoms of their own body, and medical staff also need to gradually study the good way to treat the disease in order to ensure that , the people's quality of life improves, good treatment and care to ensure the quality of life of patients excellence. Therefore, in the process of treating patients, the clinicians should pay attention to the specific characteristics of each patient and use the targeted treatment methods, so that the patient's physical symptoms will be improved, and the treatment process will have greater compliance. At the same time, on the basis of improving the patient's liver microcirculation, the patient's liver cells will change to produce excellent resistance and have a longing for life, to reduce the efficacy of the virus in the patient's body and adjust the immune function of the patient. Otherwise, it may be a legal liver cancer disorder<sup>[3]</sup>. However, HBV is continuously replicated and the patient's body will have a serious cellular immune response because Different inflammatory factors will be released to a great extent that the patient's liver will seriously be damaged and gradually develops into a liver failure and good antiviral drugs will play an important role, in the role of the patient's physical and mental condition and will be greatly improved. There are malignant tumors in patients with liver cancer and the patient's quality of life will not be good as well as the pain in daily life will significantly increased, this disease is the result of a combination of various factors whose symptoms in the early stage are not obvious on the basis of continues development of disease, the patient will be very tired resulting in a lot of fatigue and the upper digestive tract will also bleed as well as the symptoms of physical discomfort will become more serious, this kind of situation should be highly valued by the people and when the body has symptoms of discomfort, it is necessary to use the various excellent examination methods and treatment methods to ensure positive treatment effects.

#### 5. Summary

The MSI has no correlation with the incidence of most HCC and the carcinogenic mechanism of P53 gene mutation in HCC does not pass the path of MSI pathology and there will be difference in the expression of P53 gene mutation as well as the differences in performance can be closely related to carcinogenic factors. In order to produce a close relationship, people should gradually increase their research efforts to promote the treatment of the disease.

#### References

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