

Biochemical and Molecular Study of long non coding RNA (*HOTTIP*, *ZEB-AS1* and *MEG-3*) in Hepatocellular carcinoma



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Abstract

Background and Aim: Hepatocellular carcinoma is the subsequent driving reason for cancer death around the world. The high mortality of HCC patients is linked to delayed diagnosis. Long non-coding RNAs (lncRNAs) have been demonstrated as significant controllers in diverse human cancers. This study expected to clear up the potential diagnostic and prognostic value of long non coding RNA (*HOTTIP*, *ZEB-AS1* and *MEG3*) in HCC. This Study included 150 subjects (50 HCC and 50 cirrhotic and 50 healthy subjects)

Methods: Long non-coding RNA gene expression was estimated by real-time PCR technique.

Results: *HOTTIP* and *ZEB-AS1* were higher in HCC than cirrhotic and healthy ones ($P < 0.001$). *MEG-3* was significantly lower in HCC group compared with cirrhotic and control groups ($P < 0.001$). In HCC patients higher *HOTTIP* and *ZEB-AS1* were linked with nodal and distant metastases and lower *MEG-3* was correlated with larger tumor size also higher *HOTTIP* and lower

MEG-3 were associated with lower overall survival. ROC curve analysis revealed that values >10.35 and < 2.3 for *HOTTIP*, *ZEB-AS1* and *MEG-3* respectively.

Conclusion: *HOTTIP*, *ZEB-AS1* and *MEG-3* could be considered as diagnostic for HCC and *HOTTIP*

and *MEG-3* may represent prognostic biomarkers in HCC.

Biography:

Naglaa S. Elabd has completed MD at the age of 36 years from Faculty of Medicine - Menoufia University. She worked as Lecturer of Tropical Medicine, Faculty of Medicine - Menoufia University- Egypt science 2015. She has published 5 papers and 3 papers accepted in reputed journals

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