Immunohistochemical expression pattern of MLH1, MSH2, MSH6 and PMS2 in tumor specimen of Iranian stomach carcinoma patients

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Tissue Microarray (TMA) of the stomach carcinoma patients was obtained from the tissue banks of the Cancer Research Center of Tehran University of Medical Sciences. Immunohistochemical staining was performed using the following antibodies:
- Anti-MLH1 (clone 289.2)(Dako, Denmark)
- Anti-MSH2 (clone 133.6)(Dako, Denmark)
- Anti-MSH6 (clone m56)(Dako, Denmark)
- Anti-PMS2 (clone p62)(Dako, Denmark)

The immunohistochemical staining was visualized using the Envision+ Detection System (Dako, Denmark). The photographs were taken using a Nikon Eclipse Ti-E microscope with a DS-U3 digital camera (Nikon, Japan). The images were analyzed using the NIS-Elements imaging software (Nikon, Japan).

Results:

1. The expression of MLH1, MSH2, MSH6 and PMS2 was detected in the majority of the tumor specimens.
2. The expression of these proteins was found to be variable in different areas of the same tumor specimen.
3. The expression of these proteins was found to be lower in the tumor specimens with higher-grade malignancy.

Discussion:

The results of this study suggest that the expression of MLH1, MSH2, MSH6 and PMS2 proteins may be useful in the diagnosis and staging of stomach carcinoma patients.

References:


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