

## **INCREASED BIOCHEMICAL AND ENZYMTIC ACTIVITY OF MULTIDRUG RESISTANT STAPHYLOCOCCUS AUREUS IN COLORECTAL CANCER PATIENTS**

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**C**olorectal cancer represents as one of the major causes of death worldwide.

The aim of study was to determine changes of biochemical properties and enzymatic activity of multidrug-resistant *Staphylococcus aureus* (MDRSA) in different types and severity diseases. There were investigated pathogenic activity of this important bacterium isolated from colorectal cancer patients and were compared to MDRSA strains isolated from non-cancer patients with intestinal dysbiosis. Study revealed that MDRSA strains are widespread in patients with colorectal cancer. Additionally MDRSA strains in cancer patients revealed higher pathogenic activity than MDRSA strains in patients with dysbiosis. Some determinants of pathogenicity – lecithinase production, hemolytic, proteolytic, urease activity), also carbohydrate and mannitol fermentations in aerobic and anaerobic conditions are characterized with high activity in MDRSA strains in comparison of MDRSA strains isolated from non-cancer patients. As for coagulase and catalase tests, they were equally positive in all strains from both groups. Based on above the results of the research may determine specificity of colorectal cancer and can be considered in prognosis of this disease.

### **Biography**

Shorena Khetsuriani has completed her PhD at the age of 26 years from Tbilisi State Medical University (TSMU). She is Associate Professor of Microbiology Department of TSMU. She has published more than 80 papers in reputed journals.

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