

## The study of the markers of mood disorder with gastrointestinal cancer patients

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**Introduction:** The number of the patients of major depressive and bipolar disorders are increasing. Cancer and depression have a close relationship; about 16% of all cancer patients are diagnosed with it. In this study, we selected two genes as potential markers of the mood disorder and checked the amount of the gene expression in gastrointestinal cancer patients at several points.

**Materials & Methods:** Three patients who were diagnosed with gastrointestinal cancer were selected and we gathered blood samples. They had no medical examination of psychiatric disorder. The timings of sample collection were before operation, post-operative day 1 and almost seven days after the surgery. We gathered blood in PAXgene RNA tube. After extracting RNA, we measured the expression of two genes by Real-time PCR. All patients of this study signed written informed consent forms.

**Results:** We compared the gene expressions of before operation and post-operative day 1 and confirmed the reduction of the prevalence of mood disorder in three patients after surgery.

**Discussion:** Before an operation, the patients must have a lot of stress and after their surgery they experience relief from the stress. This study suggests that we can confirm the mood changes with numeric data. If we grasp the mood disorder in the early period of cancer patients, we can help the patients with early intervention of mental side. The optimal outcome is to increase the cases and use the markers in clinical application. Add to that, we will gather saliva specimens and measure the gene expressions as well. The reason is that we can get the patient's saliva easily and utilize in various situations; e.g. disaster and little children.

**Conclusion:** The marker of the mood disorder is suggested by colon cancer patients.

### Biography

Satoshi Tokuda graduated from Juntendo University School of Medicine in Japan in 2012. From 2012-2014, he was a Junior Resident at Juntendo Shizuoka Hospital, Shizuoka, Japan; near the Mt Fuji. He has been a GI Surgeon at Juntendo Shizuoka Hospital from October, 2014, until now.

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