# REIKI THERAPY IN A COLORECTAL CANCER PATIENT

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#### **BACKGROUND**

Colorectal cancer is the third most frequent cancer diagnosed in men and the second in women. Patients diagnoses with colorectal cancer experience physiological and psychological changes due to the disease itself and the side effects of the cancer treatment. Reiki is an energy therapy which uses a specific sequence of hand positions to channel the universal life force for recharging, realigning, and rebalancing the human energy field. Recent studies show that Reiki improves fatigue, anxiety and depression. The main objective of this study was to develop an individualized care plan in a patient with adenocarcinoma of the rectum in stage IIIC undergoing neoadjuvant radiotherapy treatment, using the NANDA, NOC and NIC taxonomy, whose main intervention was the NIC (1520) Reiki.

### **METHODS**

The main diagnostic label included in this care plan was (00050) Disturbed energy field, evaluating the level of fatigue, anxiety, depression and different physiological variables. The patient received four Reiki session of 35 minutes each one spread over 6 weeks of radiotherapy treatment, using two different Reiki Level Two practitioners. Before and after each session it was measured the level of anxiety, depression and fatigue with validated questionnaires. Furthermore, in order to measure the physiological effects of Reiki, it was evaluated the heart rate variability with a Holter monitor.

## **RESULTS**

Results showed a decrease in anxiety, depression and fatigue after each Reiki session, and also an increase in heart rate variability. Although the level of fatigue had a peak after 18 Reiki sessions, it was observed an improvement of fatigue and vagal activity as well as a decrease in anxiety and depression at the end of the radiotherapy treatment, reaching the target score of each indicator of the selected NOC. Regarding heart blood variability, after each Reiki session it was observed an increase in SDNN, RMSSD and HF parameters, and a decrease in LF and LF/HF, which indicates an activation of the parasympathetic nervous system and a decrease in the sympathetic nervous system.

## **REFERENCES**

Ferlay et al (2013). GLOBOCAN 2012, cancer incidence and mortality worldwide: IARC CancerBase no. 11.

Stone PC et al (2008). Cancer-related fatigue. Eur J Cancer, 44(8):1097-104. Thayer JF et al (2012). A meta-analysis of heart rate variability and neuroimaging studies: Implications for heart rate variability as a marker of stress and health. Neurosci Biobehav Rev, 36(2):747-56.

Coakley AB et al (2012). Energy therapies in oncology nursing. Semin Oncol Nurs, 28(1):55-63.

Catlin A et al (2011). Investigation of standard care versus sham Reiki placebo versus actual Reiki therapy to enhance comfort and well-being in a chemotherapy infusion center. Oncol Nurs Forum, 38(3):212-20.

Birocco N et al (2012). The effects of Reiki therapy on pain and anxiety in patients attending a day oncology and infusion services unit. Am J Hosp Palliat Care, 29(4):290-4.

Bower JE et al (2009). Inflammatory Biomarkers and Fatigue during Radiation Therapy for Breast and Prostate Cancer. Clin Cancer Res, 15(17): 5534-40.

Guo Y et al (2013). Heart rate variability as a measure of autonomic dysfunction in men with advanced cancer. Eur J Cancer Care, 22(5):612-6.

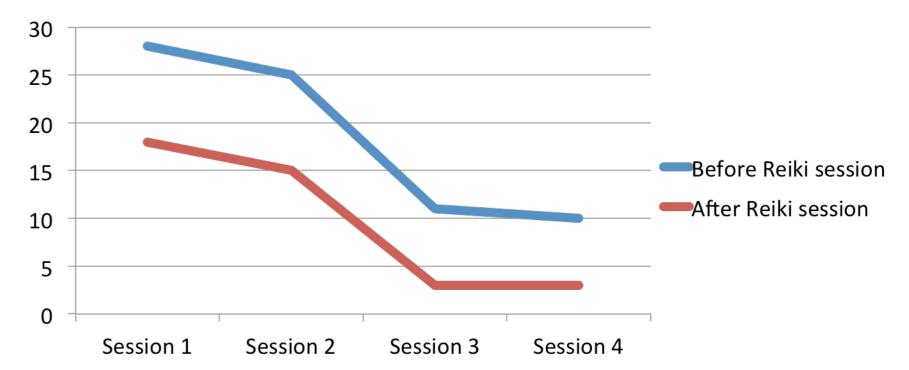


Figure 1. Level of anxiety before and after each Reiki session according to the State-Trait Anxiety Inventory.

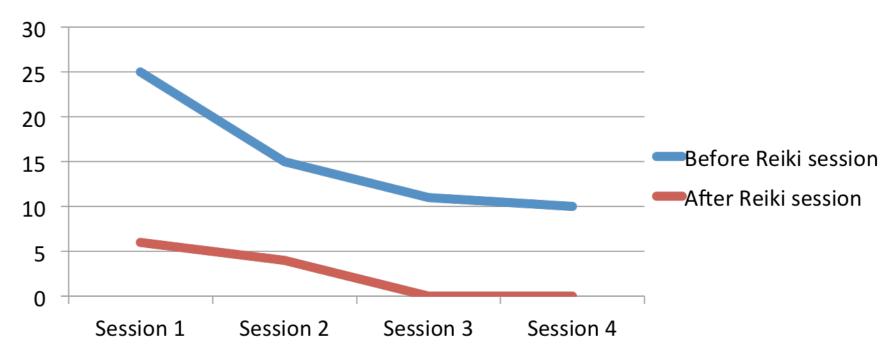


Figure 2. Level of depression before and after each Reiki session according to the Beck Depression inventory.

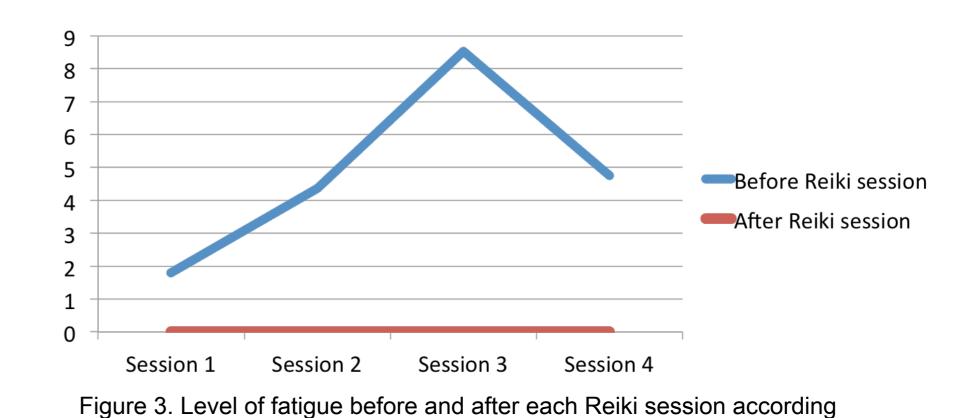


Table 1. Heart rate variability (HRV) parameters before and after each Reiki session.

to the Piper Fatigue Scale.

	Session 1	Session 2	Session 3	Session 4
SDNN (pre)	53.91	54.64	45.34	52.23
SDNN (post)	63.46	62.73	60.23	61.12
RMSSD (pre)	46.23	43.08	41.01	43.56
RMSSD (post)	60.34	54.40	60.87	94.88
HRV (pre)	6.01	5.58	3.74	4.46
HRV (post)	5.95	6.27	5.01	6.02
LF (pre)	129.55	142.34	159.90	134.57
LF (post)	107.90	131.45	139.55	127.64
HF (pre)	213.66	246.66	193.32	200.43
HF (post)	240.12	251.82	248.44	250.29
LF/HF (pre)	1.20	1.42	1.71	1.56
LF/HF (post)	0.95	0.75	0.66	0.41

#### CONCLUSSION

It is suggested that Nursing professional should be trained in NIC (1520) Reiki to apply comprehensive care to cancer patients and improve their quality of life.

