



Changes in fear of cancer recurrence and its related factors in early stage lung cancer survivors



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ABSTRACT

Cancer screening and treatment advances have extended lung cancer patients' lives in recent years (Xia et al., 2017). However, fear of cancer recurrence (FCR), which was defined as “the fear or worry that the cancer will return or progress in the same organ or in another part of the body” (Vickberg, 2003) has become a common psychological worry for cancer survivors. Understanding the changes in FCR over time and important predictors are needed to provide suitable intervention. Therefore, the aim of this study was to explore the changes of fear of cancer recurrence (FCR) and its sub-groups in early stage lung cancer patients, and to determine the predictors of FCR.

METHODS

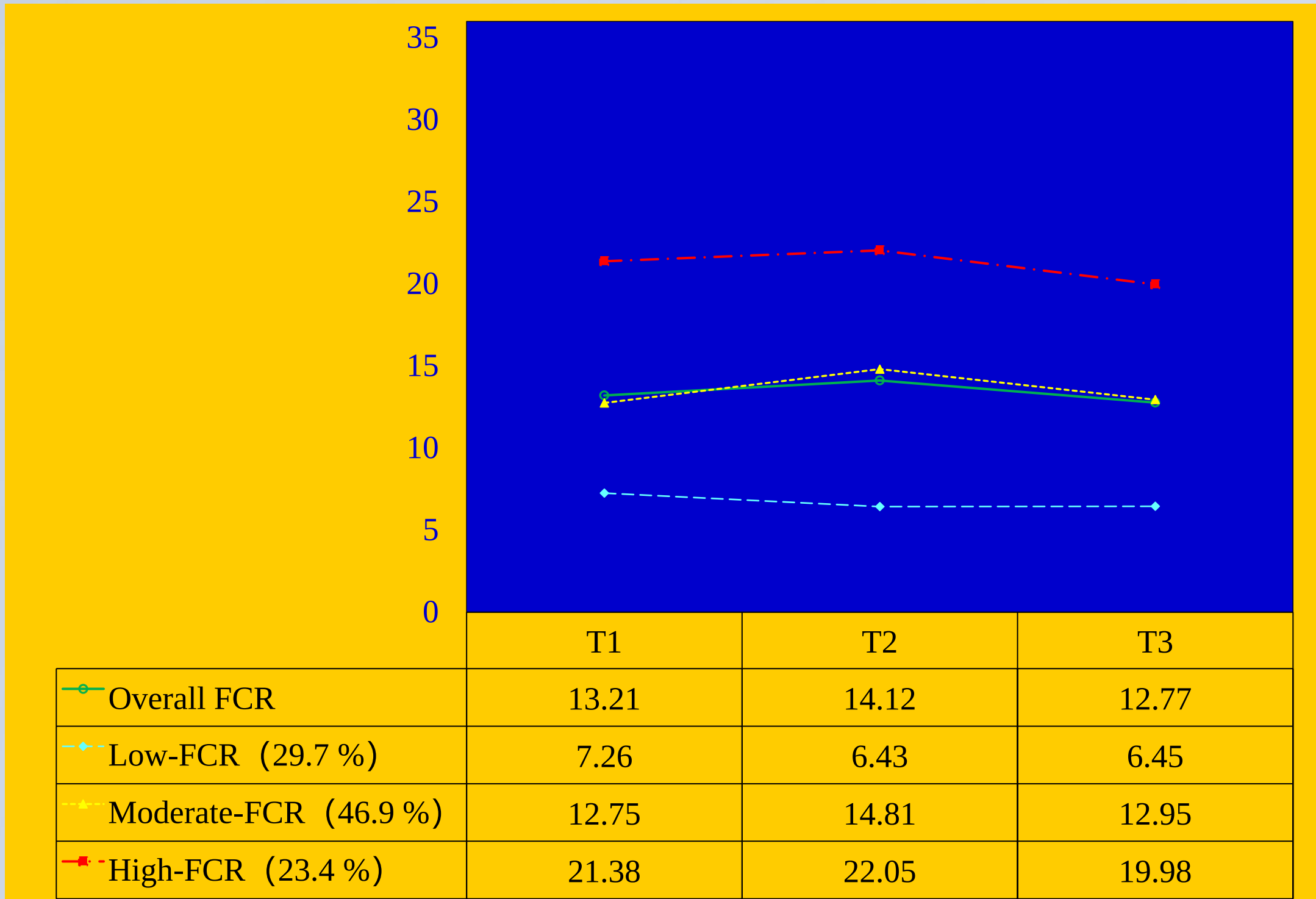
A prospective longitudinal study was conducted at a medical center in north Taiwan. A total of 180 adult patients with newly diagnosed as early stage (I-IIIa) lung cancer who underwent the minimally invasive thoracic surgery were enrolled. The FCR was evaluated by the severity subscale of Fear of Cancer Recurrence Inventory (FCRI)(Simard & Savard, 2009, 2015) at 3, 6, and 12 months after surgery. Latent class growth model (LCGM) (Nagin, 2010) was applied to explore the potential sub-groups of FCR. The significant predictors were identified by generalized estimating equations (GEE)(Ballinger,2004).

RESULTS

The trend of overall FCR was revealed a quadratic change and patients achieved clinically significant levels of FCR. Three distinct sub-groups of FCR were identified: high-FCR (23.4 %), moderate-FCR (46.9 %), and low-FCR (29.7 %), respectively. Age(younger), education levels(higher), adjuvant treatment, fatigue, dyspnea, and uncertainty were significant predictors related to the changes in FCR over time including overall FCR and sub-groups.

CONCLUSIONS

Our results support that the overall FCR revealed a quadratic change over time, and before the 6-month is the most important timing to assess and provide intervention for high-FCR patients. Distinct sub-groups FCR existed among early stage lung cancer patients. After considering for time-invariant variables, we found that fatigue, dyspnea and uncertainty were important factors related to FCR over time. It can be applied at clinical settings to identify high risk patients who may be in a persistent high state of FCR over time.



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