

**TITLE OF THE ABSTRACT :** A STUDY ON THE EFFECTS OF DELAY  
IN ADJUVANT CHEMOTHERAPY ON SURVIVAL IN PATIENTS UNDERGOING  
CURATIVE RESECTION FOR RECTAL CANCER AND THE RISK FACTORS  
ASSOCIATED WITH DELAY IN CHEMOTHERAPY.

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**OBJECTIVES:** This study is aimed at assessing overall and five year survival in patients who receive chemotherapy within and after 8 weeks of curative rectal cancer resection and to assess the factors causing delay in receiving chemotherapy.

**METHODS:** This is a historical bidirectional cohort study in which consecutive patients who underwent curative rectal cancer surgery in the Department of Surgery 2 at Christian Medical College Vellore from 1st January 2007 and requiring adjuvant chemotherapy were included. The data was collected on the pro formas and through telephonic conversations.

Data was analyzed for survival using Kaplan Meier Curve and Cox proportionate Hazard model. Risk factors for delay in chemotherapy will be analyzed using Chi square and Independent sample T test and logistic regression. The optimal cut-off for delay in chemotherapy was calculated using a receiver-operator characteristic (ROC) curve.

**RESULTS :**

In our analysis, the majority of patients with stage III rectal cancer had initiated adjuvant chemotherapy within 11 weeks of resection. We observed that patients with abdominoperineal resection had perineal wound infection and dehiscence leading to delayed hospital stay. Mostly delay in chemotherapy initiation was due to prolonged hospital stay secondary to post operative complication.

Comorbidities, age and pathological staging did not cause delay in treatment. Even when those factors were taken into account, treatment delay was associated with poorer cancer-specific and overall survival.

However, the initiation of chemotherapy within 8 weeks after surgery was not associated with better outcomes. There was no significant difference in overall and disease free survival based on timing of adjuvant chemotherapy.

**KEYWORDS :** Curative rectal cancer resection, adjuvant chemotherapy, 8 weeks, survival.