

## **INTRODUCTION**

*The rectum is one of the most frequent sites of neoplasms in the gastrointestinal tract (about 35%), Colo-rectal cancer is one of the most common cancers all over the world, more than two thirds of cases occur in economically developed countries, it is considered the third in frequency after non-melanocytic skin cancers and lung cancer in male and non-melanocytic skin cancer and breast cancer in females, it is also the fourth leading cause of cancer mortality as it has better prognosis than other cancers (Winawer et al .,2006).*

*About 20% of cases of colo-rectal neoplasms could be detected early and screened by sigmoidoscopy and colonoscopy, as most cases are simple localized polyps which could be removed by endoscopic techniques or localized surgery and sometimes major surgery is required (Yong et al .,2001).*

*Treatment and surgery techniques for rectal cancer patients have rapidly changed over the last two decades in order to improve the therapeutic outcome. Other methods were made to improve the functional results and quality of life by low anterior resection instead of abdominoperineal resection by the use of stapling techniques. Many trials including adjuvant chemotherapy, neo-adjuvant chemotherapy, pre-operative radiotherapy*

*and immunotherapy have rapidly developed with the aim of decreasing the recurrence rate and increase the survival of the patients (Russel et al., 2001).*

*Laparoscopic surgery was first attempted in the field of the colorectal surgery in the early 1990s and the introduction of laparoscopic staplers has contributed significantly to the development of these procedures (yong et al ., 2001 ).*

*In the recent 2 decades, improvements have been achieved in the outcomes of rectal cancer surgery with the advances in surgical techniques as well as adjuvant therapy. Abdominoperineal resection (AP), the previous gold standard treatment of rectal cancer, has been regarded as unnecessary in most patients with rectal cancer and more patients can now be treated with sphincter-saving surgery. Local recurrence has always been a formidable problem following rectal cancer surgery.. The presence of residual tumour following surgical resection strongly determines future outcome. The response to chemoradiation will facilitate sphincter sparing options . Nevertheless, all progress in the development of oncologic therapy (i.e., radiation and chemotherapy), radical surgical removal of the tumour is the only chance for permanent cure of rectal cancer. Beside this main objective, the preservation of faecal continence is the*

*second-most important goal to reach an acceptable quality of life with preservation of sphincter function(Leory et al.,2004).*