

Original Research Article

# To assess quality of life post Low Anterior Resection in Cancer rectum patients.

Dr. Ajeet Singh Makkar<sup>1</sup> (Associate Professor), Dr. Sanjay Kumar Gohar<sup>2</sup> (Associate Professor), Dr. Sunil Kumar Gehlot<sup>3</sup> (Associate Professor), Dr. Rakesh Pancholi<sup>4</sup> (Associate Professor), Dr. Muffazzal Rassiwal<sup>5</sup> (Assistant Professor), Dr. Gourav Kumar Saxena<sup>6</sup> (Assistant Professor) & Dr. Amol Deniel<sup>7</sup> (Assistant Professor)

Dept. of General Surgery, Index Medical College Hospital & Research Centre, Indore, M.P.  
1,2,3,4,5,6&7

Corresponding Author: Dr. Sanjay Kumar Gohar

## Abstract

**Background & Methods:** The aim is to assess quality of life post Low Anterior Resection in Cancer rectum patients. Low Anterior Resection. Patients were followed up for a period of six months post-surgery and were followed up with a questionnaire/ schedule regarding both preop and postop status. The 6-month time point was selected because most patients reach their stable state with respect to the LARS symptoms within 6 months.

**Results:** All the patients underwent neoadjuvant and adjuvant chemoradiotherapy as deemed fit according to their general condition and stage of the disease. Chemotherapy with FOLFOX was given to all in both neoadjuvant and adjuvant combined and radiotherapy was given in those who showed delayed response to surgery or chemo.

**Conclusion:** Post-operative patients were studied with the aim of assessing their Quality of life with respect to anal and genitourinary incontinence, and after thorough analysis, we have come to the conclusion that nearly all of the patients suffer with some form of Low Anterior Resection Syndrome symptoms, where some present with severe LARS and some with No LARS, but nevertheless, every patient presents with one or more of the specified defining symptoms of LARS.

**Keywords:** quality, Low Anterior Resection, Cancer & rectum patients.

**Study Design:** Observational Study.

## 1. Introduction

The surgical treatment of rectal cancer has evolved significantly over the last 250 years, paralleling the evolution of the art and science of surgery in general[1]. The first procedure was local excision and was nearly always palliative in nature. Improvement in anesthesia and antisepsis allowed the development of radical extirpative procedures done with curative intent. The present time again finds local therapy of the integral technique in the armamentarium of the surgeon treating patients with rectal cancer.

LAR is now the procedure of choice for upper and middle rectal cancers. It has been compared with other prevalent surgical techniques, namely APR with sphincter preservation and without, in various studies around the globe[2]. In a study on 5201 patients undergoing

LAR and APR, LAR may improve QoL in older age and those with lesser co-morbidities and its use has only increased in the past[3].

Bowel preservation surgeries for Ca Rectum have definitely increased the level of QoL in post-op patients, LAR being the most common of those. A similar study, as conducted by A S Allal et al from University Hospital of Geneva, Switzerland regarding QoL outcomes and feasibility of sphincter sparing surgeries after preoperative radiotherapy for low rectal carcinoma, on 53 patients, concluded that these surgeries are feasible without affecting oncological outcome and the patients undergoing APR reported more sexual dysfunction in males and better physical function, future perspective and global QoL than those undergoing LAR[4].

## 2. Material and Methods

A detailed case history was recorded and a thorough clinical examination was carried out for subjects in the study group. The quality of life with respect to urinary and fecal incontinence was assessed post op by a well-defined questionnaire at 6 months post op.

Eligible patients included known cases of rectal cancer in persons aged more than 18 years of age who were diagnosed and treated in Index Medical College Hospital & Research Centre, Indore for 01 Year, by Low Anterior Resection. Patients were followed up for a period of six months post-surgery and were followed up with a questionnaire/ schedule regarding both preop and postop status. The 6-month time point was selected because most patients reach their stable state with respect to the LARS symptoms within 6 months. Other exclusion criteria included: significant co morbidity during or after surgery and Treatment; other major illness; local or distant recurrence or new cancers; and treatment by local excision.

### Inclusion Criteria

- (a) Patients of any age.
- (b) Patients with complaint of mass per rectum with preop histopathological proof.

### Exclusion Criteria

- (a) Patients not willing to give consent.
- (b) Patients whose follow up is doubtful.

## 3. Result

**Table 1: Age Distribution**

| AGE   | PATIENTS | PERCENTAGE |
|-------|----------|------------|
| 20-29 | 04       | 4%         |
| 30-39 | 16       | 16%        |
| 40-49 | 24       | 24%        |
| 50-59 | 38       | 38%        |
| 60-69 | 16       | 16%        |
| 70-79 | 02       | 2%         |

The age ranged from 20-75 years with youngest being lady of 26 years age and oldest being a 75 year old gentleman.

**Table 2: Presenting symptoms**

| Symptoms     | Male | Female | Total | PERCENTAGE |
|--------------|------|--------|-------|------------|
| Constipation | 40   | 28     | 68    | 68%        |
| Loose Stools | 18   | 14     | 32    | 32%        |
| Bleeding PR  | 50   | 40     | 90    | 90%        |

The presenting complaints these patients were evaluated upon were Loose stools, per rectal bleed and constipation. 90% of patients presented with per rectal bleed with majority being constipated rather with loose stools.

**Table 3: Types of cancer**

|           | MALE | FEMALE | TOTAL | PERCENTAGE |
|-----------|------|--------|-------|------------|
| WELL DIFF | 32   | 28     | 60    | 60%        |
| MOD DIFF  | 06   | 10     | 16    | 16%        |
| OTHERS    | 20   | 04     | 24    | 24%        |

Patients were divided according to the degree of differentiation of tumour as assessed by histopathology into well differentiated adenocarcinoma, poorly differentiated adenocarcinoma or other types of tumours.

**Table 4: Chemo and Radiotherapy**

|                | PATIENTS | PERCENTAGE |
|----------------|----------|------------|
| CHEMO          | 94       | 94%        |
| NEOADJUVANT RT | 70       | 70%        |
| ADJUVANT RT    | 14       | 14%        |

All the patients underwent neoadjuvant and adjuvant chemoradiotherapy as deemed fit according to their general condition and stage of the disease. Chemotherapy with FOLFOX was given to all in both neoadjuvant and adjuvant combined and radiotherapy was given in those who showed delayed response to surgery or chemo.

#### 4. Discussion

The current study directed at our clinic on the Personal satisfaction of patients subsequent to going through LAR uncovers a few viewpoints which are innately connected with the sickness cycle and the therapy modalities, not to fail to remember the social disgrace joined to such an illness in a nation like India[5].

As currently referenced in the examination, the greater part of the patients were matured 50 or above and the most youthful was only a 26 year old lady[6]. This shows the wide range of patients who are impacted by the rectal carcinoma in India and what all shifted introductions they can accompany. Additionally, unique age bunches implies various needs to screen the Personal satisfaction being impacted by the sickness or the therapy.

More number of male patients when contrasted with female patients (58% v/s 42%) is in concordance with the general information but on the other hand is halfway because of the social elements prompting diminished consciousness of a female's wellbeing when contrasted with a male's in our country.

Per rectal drain is the most widely recognized introducing side effect of carcinoma rectum and 90% patients gave this grievance alongside obstruction or looseness of the bowels with stoppage being more common than the runs as a symptom[7].

Every one of the patients were exposed to chemotherapy as recently talked about and chose patients were given neoadjuvant and adjuvant radiotherapy in light of their reactions to chemotherapy and medical procedure. Also, further on conversation well notification how the radiotherapy prompts expanded frequency of LAR[8]. One was lost to prompt post-usable entanglement, other to advanced age and general weakness and third one essentially missed out on correspondence. Loss of correspondence is an extremely large issue in persistent consideration in the nation and we were fortunate to not have more misfortunes like the same[9].

## 5. Conclusion

The patients who presented in our centre were studied for post-operative quality of life based on LARS scoring and within a span of six months postop, most of the patients had their own set of problems which affected their daily life. These problems of uncontrolled flatulence and liquid stool incontinence, along with genitourinary incontinence are inherent complications of LAR and they tend to achieve and settle at a set level within 2-5 years of surgery. Post-operative patients were studied with the aim of assessing their Quality of life with respect to anal and genitourinary incontinence, and after thorough analysis, we have come to the conclusion that nearly all of the patients suffer with some form of Low Anterior Resection Syndrome symptoms, where some present with severe LARS and some with No LARS, but nevertheless, every patient presents with one or more of the specified defining symptoms of LARS.

## 6. References

1. Moore Hg, Riedel E, Minsky BD, et al, Adequacy of 1 cm distal margin after restorative rectal cancer resection with sharp mesorectal excision and preoperative combined modality therapy *Ann Surg Oncol* ,2003 ;10:80-5
2. Sauer R, Becker H, Hohenberger W, Rodel C, Wittekind C et al Preoperative versus post-operative chemotherapy for rectal cancer *N Eng J Med* 2004 17;1731
3. Poon Jt Law Wl Laproscopic resection for rectal cancer a review *Ann Surg Oncol* 2009;16:3038.
4. N S Abraham, J A Davilla, L Rabeneck, D H Berger & H B El-Serag Increased use of low anterior resection for veterans of rectal cancer. *Ailment Pharmacol Ther* 2005; 21: 35-41
5. Allal AS(1), Bieri S, Pelloni A, Spataro V, Anchisi S, Ambrosetti P, Sprangers MA, Kurtz JM, Gertsch P. Sphincter-sparing surgery after preoperative radiotherapy for low rectal cancers: feasibility, oncologic results and quality of life outcomes. *Br J Cancer*. 2000 Mar;82(6):1131-7.
6. Peeters KC, van de Velde CJ, Leer JW et al. Late side effects of short-course preoperative radiotherapy combined with total mesorectal excision for rectal cancer: increased bowel dysfunction in irradiated patients - a Dutch colorectal cancer group study. *J Clin Oncol* 2005; 23: 6199-6206.

7. Pollack J, Holm T, Cedermark B, Holmstrom B, Mellgren A. Long-term effect of preoperative radiation therapy on anorectal function. *Dis Colon Rectum* 2006; 49: 345-352.
8. Bretagnol F, Troubat H, Laurent C, Zerbib F, Saric J, Rullier E. Long-term functional results after sphincter-saving resection for rectal cancer. *Gastroenterol Clin Biol* 2004; 28: 155-159.
9. Grumann MM, Noack EM, Hoffmann IA, Schlag PM. Comparison of quality of life in patients undergoing abdominoperineal extirpation or anterior resection for rectal cancer. *Ann Surg* 2001; 233: 149-156.