

## Rectal resection with low anastomosis: functional outcome

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### Objective

Function after anterior, low anterior and intersphincteric resection for rectal cancer was studied.

### Method

Of 139 patients 122 responded to a standardized questionnaire (Cleveland Clinic Continence Score)  $108 \pm 46$  weeks postoperatively and 70 underwent anorectal manometry at  $26 \pm 15$  weeks.

### Results

The postoperative continence score was dependent on the procedure (anterior resection  $4.1 \pm 4.6$ , low anterior resection  $6.9 \pm 5.6$ , intersphincteric resection  $11.5 \pm 5.2$ ;  $P < 0.0001$ ). It was poorer after radiochemotherapy ( $9.0$  vs.  $5.7$ ;  $P = 0.030$ ), but after colonic pouch reconstruction there was no significant difference between low anterior resection ( $5.6$  vs.  $7.3$ ) and intersphincteric resection ( $10.0$  vs.  $12.5$ ). Mean and maximal resting pressures were significantly reduced after intersphincteric resection ( $24 \pm 9$  and  $40 \pm 13$  mmHg, respectively,  $P < 0.001$ ) and further reduced by radiochemotherapy. Squeeze pressure was unaffected by the operative procedures and radiochemotherapy. Maximum tolerable volume and rectal compliance were reduced, after both low anterior and intersphincteric resection. Statistical correlation between continence score and maximal resting pressure ( $P = 0.014$ ), mean resting pressure ( $P = 0.002$ ), urge volume ( $P = 0.037$ ), and neorectal compliance ( $P = 0.0018$ ) reached significance. Satisfaction with the functional outcome was expressed by 71% of patients.

### Conclusion

After rectal resection the degree of impaired continence depended on the operative procedure and the form of reestablishment of intestinal continuity. Radiochemotherapy affected the outcome adversely. Despite reduced function, overall patient satisfaction was high.