Pelvic exenteration for advanced colorectal cancer

Visokai V., Lipska L., Levy M., Trubac M.

Department of Surgery of the 1st Faculty of Medicine
Charles University Prague and Thomayer Teaching Hospital,
Prague, Czech Republic
Adherence to adjacent intraabdominal organs or structures is encountered in 15% of patients with a colorectal cancer.

Total pelvic exenteration is defined as the complete resection of the pelvic viscera and its draining lymphatic system.

The objective of total pelvic exenteration is to encompass all malignant tissues including adjacent invaded viscera and regional lymphatics.
Pelvic exenteration

**Total**: entails en bloc removal of the rectum and anus, urinary blader, internal genitalia with pelvic lymph nodes with or without sphincter preservation.

**Anterior**: resection of the bladder and internal genital organs beside a pelvic lymphadenectomy. Rectum is intact.

**Posterior**: resection of the rectum, distal colon, uterus and internal genital organs with or without preservation of the anal sphincter, depending on tumor extension.

**Composite**: including resection of bony pelvis (mostly coccyx and sacrum-up to S3,S2).
Surgical strategy

Contraindication to pelvic exenteration (Lopez)

- Absolute
  - Unresectable distant metastases
  - Peritoneal carcinomatosis
  - Circumferential pelvic involvement
  - Proximal pelvic ureteral obstruction
  - Sciatic nerve pain
  - Tumor fixation with bony invasion
  - Progressive leg edema
  - Major comorbid conditions

- Relative
  - Age over 70 years
  - Low pelvic ureteral obstruction
  - Periosteal tumor fixation
  - Moderate comorbidity
  - Severe malnutrition
  - Nonaxial recurrence
  - Short disease-free interval
  - Multiple lymph node metastases
Pelvic exenteration - Thomayer Teaching Hospital

- Total number: 24
- Men: 18
- Women: 6
- Blood lose: 4300 (750 – 9500 ml)
- Morbidity: 42%, urinal leak in 75%
- Mortality: 8.3% (2 pts.)
- 3-year survival: 69%

- Internal iliac vessels resection: 13
- Sfincter saving resection: 4
- Composite pelvic exenteration: 1
- Liver met resection before op.: 1
- Simultaneous adrenalectomy for met: 1
- PE + en bloc bowel resection: 4
- PE with vulvectomy: 2

Thomayer Teaching Hospital Prague, Czech Republic
Pelvic exenteration

Includes

- ligature of IMA at its origine
- lateral pelvic nodes dissection
- lymphonodes along external iliac vessels
- endopelvic fascia
- all infiltrated organs
- infiltrated bone – last step for possible bleeding
- resection of internal iliac vessels- if infiltration of lateral pelvic nodes is suspected
Video (2:50 min.)

Total pelvic exenteration with coccygeal resection 4 years after Miles operation.
Conclusion

Our results confirm that in the case of invasion of rectal cancer to the adjacent pelvic organs or structures, pelvic exenteration offers the only chance of potentially curative treatment.
Thank you for your attention