Mesh reconstruction of anterior/posterior pelvic and sacrococcygeal compartments in oncologic patients with major surgery: Early results

Eray Kara¹,Şafak Ulutürk¹,Mesut Mete²,Cüneyt Temiz² Celal Bayar University,School of Medicine, Depts of General Surgery&Neurosurgery, Manisa,Turkey

Aim: Both sacral and perineal hernias are uncommon defects developing through the pelvic floor following major surgery as abdominoperineal resection or sacrectomy in patients with anorectal or sacral tumors. Repair of this hernia is a challenging surgical problem. Various methods of repair have been proposed and include an abdominal, perineal, sacral or combined abdominoperineal approach to the hernia. Wound complications after chemoradiotherapy for these patients occur in up to 60%. The aim of this study is to describe the results of mesh reconstruction of the pelvic floor and sacrum in oncologic patients with large defects after aggressive surgery.

Patinets &Methods: Seven male and two female, totally nine patients with anterior/posterior pelvic reconstruction due to cancer were analyzed between 2011-2016. The mean age and follow-up were 64 years and 13 months.

Results: Tumor excision with sacrectomy were performed in 5 patients with sacral chordoma. Anteropelvic and perianal excision or abdominoperineal resections were performed in 4 cases. All patients underwent prosthetic graft recosntruction with or without advanced skin flaps of either posterior pelvic or anterior pelviperineal compartments. Whereas two patients received neoadjuvant CRT,others had received adjuvant therapy. Four recurrences were seen in two patients with sacral chordoma. Overall mortality and morbidity rates were 0% and 30%.

Conclusion: Total or partial sacrectomy with or without perineal resections often required to treat cancers involving the sacrum, such as chordomas, chondrosarcomas, giant cell tumors, osteosarcomas, and recurrent or invasive rectal cancer. Anterior and/or posterior pelvic graft reconstruction should be considered in oncologic cases with major surgery of this field but long term results should clearly be analyzsed.

Literature:

- 1. Varga PP, Bors I, & Lazary A. Sacral tumors and management. Orthop Clin North Am 2009; 40: 105-123.
- 2. Zhang HY, Thongtrangan I, Balabhadra RS *et al.* Surgical techniques for total sacrectomy and spinopelvic reconstruction. Neurosurg Focus 2003; 15: E5.
- 3. Wuisman P, Lieshout O, Sugihara S *et al*. Total sacrectomy and reconstruction: oncologic and functional outcome. Clin Orthop Relat Res 2000: 192-203.
- 4. Atalar H, Selek H, Yildiz Y *et al*. Management of sacrococcygeal chordomas. Int Orthop 2006; 30: 514-518.

Figures:





