

Management Of Benign And Malignant Sacral Tumors Requiring Spino-Pelvic Reconstruction: Our Experience Of 5 Cases

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INTRODUCTION:

Sacrectomy is a procedure performed to remove sacral tumors. The common types of sacral tumors are chordoma, schwannoma and giant cell tumor. We are sharing our sacrectomy experience over a decade of follow up to 68 months. The main objective is to evaluate the functional and oncological outcomes.

MATERIALS & METHODS:

It is retrospective study of 5 patients who underwent spinopelvic reconstruction for various sacral tumors from 2006-2017.

RESULTS:

There were 2 patients with sacral chordoma, 2 patients with sacral schwannoma and one patient with sacral chondrosarcoma. Fig 1 and Fig 2 represent X-ray and MRI showing in heterogeneous mass from L5 finding from a patient suffering from sacral schwannoma. 2 patients had iatrogenic rectal injury during the procedure. Only one patient had normal bowel and urinary movement while the rests developed urinary and bowel incontinence post-operatively. 4 patients developed wound dehiscence post-operatively, however all healed with dressing and antibiotic. 4 patients had recurrent while the other one is still under observation. Of all 4 patients with recurrent, only 1 patient underwent radiotherapy. 1 of the patients were lost during follow up.

DISCUSSIONS:

The techniques of sacrectomy were popularized by Gunterberg. It pose unique challenge to surgeon due to complex and biomechanical properties of spinopelvic junction. Resection is associated with neurological deficit in 4 cases. Blood loss is significant consideration cases ranging from 2 units to 13 unit. Preoperative embolization or intraoperative ligation of internal iliac decreased the blood loss. Surgical

complications includes superficial or deep infection or cause significant morbidity. 40% of patients developed superficial and 40 % developed deep infection. In one patient, there was dural injury along with deep infection which was managed with dural repair with local lumbar fascia rotation flap.

CONCLUSION:

The treatment of sacrectomy for sacral tumor is crucial and require proper pre-operative planning. Despite well-planned surgical planning, intra and post-operative complications are unavoidable. Negative surgical margin is difficult to achieve especially in advance cases. Sacrectomy may reduce the tumor bulk and offers possible long term disease free.



Fig 1

Fig 2

REFERENCES:

1. Management of Sacral Tumors Requiring Spino-Pelvic Reconstruction with Different Histopathologic Diagnosis: Evaluation with Four Cases. Murat, Asian Spine Journal.