

PEDIATRIC LAMINOPLASTY FOR SPINAL CORD TUMORS

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PEDIATRIC LAMINOPLASTY FOR SCT

INTRODUCTION:

PEDIATRIC SPINAL CORD TUMORS ACCOUNTING FOR 5% OF ALL PEDIATRIC CNS TUMORS.

SPINAL DEFORMITIES DEVELOP EVEN YEARS FOLLOWING RESECTIVE SURGERIES.

INCIDENCE OF SPINAL DEFORMITIES UP TO 40%.

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RISK FACTORS:

PRE OPERATIVE SPINAL DEFORMITY.

MULTI SEGMENT INVOLVMENT.

POST OPERATIVE RADIATION.

TETHERED CORD.

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RISK FACTORS:
NEUROLOGICAL DEFICIT.

LAMINECTOMY.

YOUNG AGE GROUP < 5 YEARS

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OBJECTIVE:

GROSS TOTAL RESECTION CAN BE ACHIEVED IN THE MAJORITY OF CASES.

POST OPERATIVE SPINAL DEFORMITY COMPLICATES OUTCOME IN PEDIATRIC SPINAL CORD TUMOR PATIENTS.

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OBJECTIVE:

WE AIMED TO DETERMINE THE ROLE OF OSTEOPLASTIC LAMINOPLASTY AND LAMINOTOMY IN MINIMIZATION OF THE INCIDENCE OF POST OPERATIVE SPINAL DEFORMITIES AT OUR INSTITUTION.

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METHODS:

WE RETROSPECTIVELY REVIEWED OUR PEDIATRIC PATIENTS WHO UNDERWENT LAMINOTOMY AND OSTEOPLASTIC LAMINOPLASTY FOR SPINAL CORD TUMORS TOTAL 10 PATIENTS WERE INCLUDED IN THE STUDY.

WE FOLLOWED CLOSELY THE SERIAL RADIOLOGICAL IMAGES AND CLINIC VISITS CHARTS.

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RESULTS:

OVERALL THE PATIENTS MEAN AGE WAS 8 YEARS
+/- 6 YEARS.

MORE THAN 85% RESECTION WAS ACHIEVED IN
80% (6 CASES).100% IN (4 CASES)

TUMORS WERE INTRAMEDULLARY IN 50% (5 CASES)

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RESULTS:

EXTRAMEDULLARY 50% (5 CASES).

NO CSF LEAK COMPLICATED ANY CASE.

MEAN LENGTH OF HOSPITALIZATION WAS 14 DAYS.

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RESULTS:

INVOLVEMENT OF CERVICAL SEGMENT 30%

CERVICOTHORACIC 20%

LUMBOSACRAL 20%

THORACOLUMBAR 30%

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RESULTS:

ADJUVANT THERAPY RECEIVED BY 40% (4 CASES)

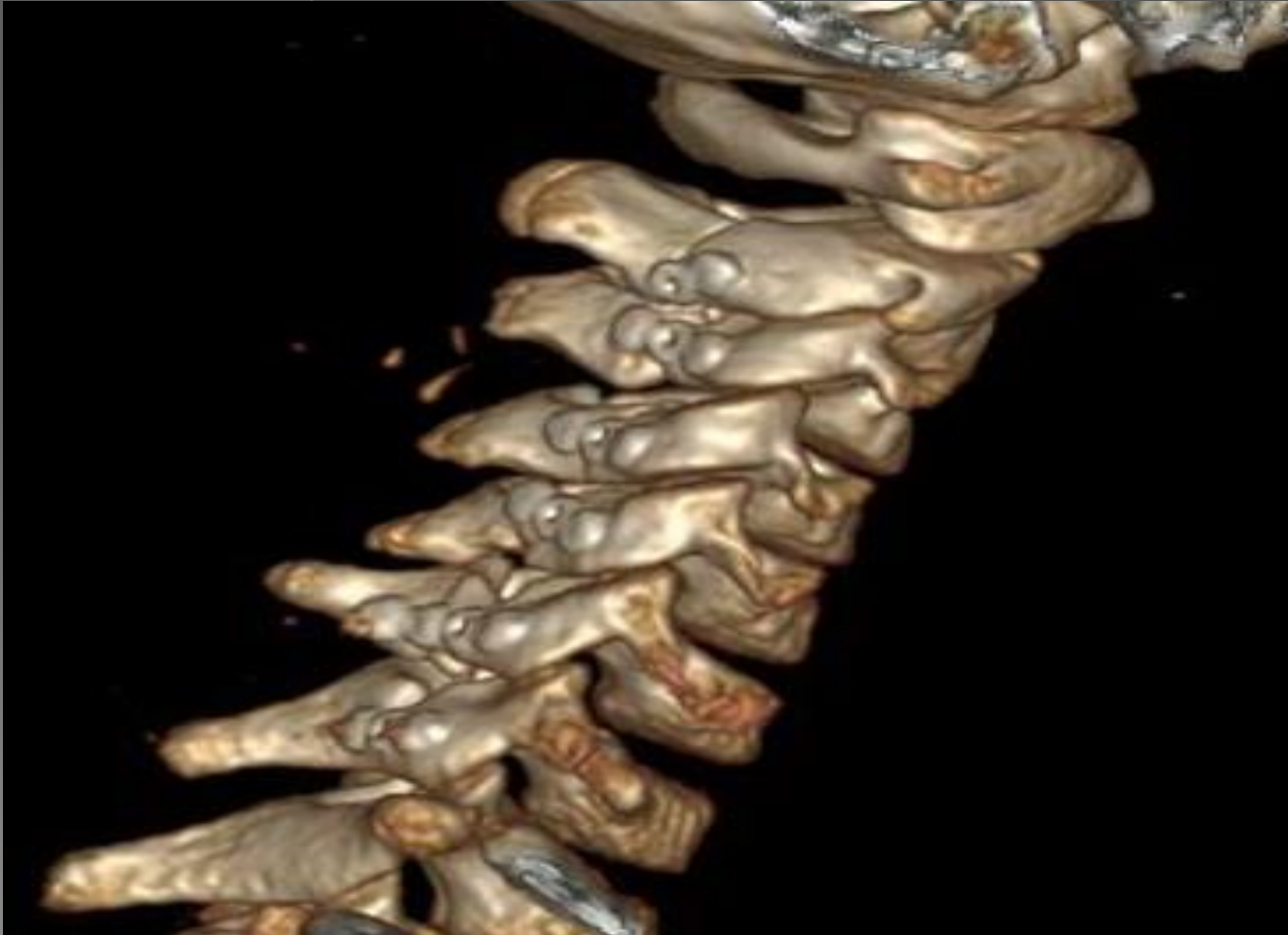
MEAN FOLLOW UP POST OPERATIVE WAS 13.25
MONTHS

INTRAOPERATIVELY WE USED MICRO-PLATES AND
SCREWS TO FIX THE LAMINAE.

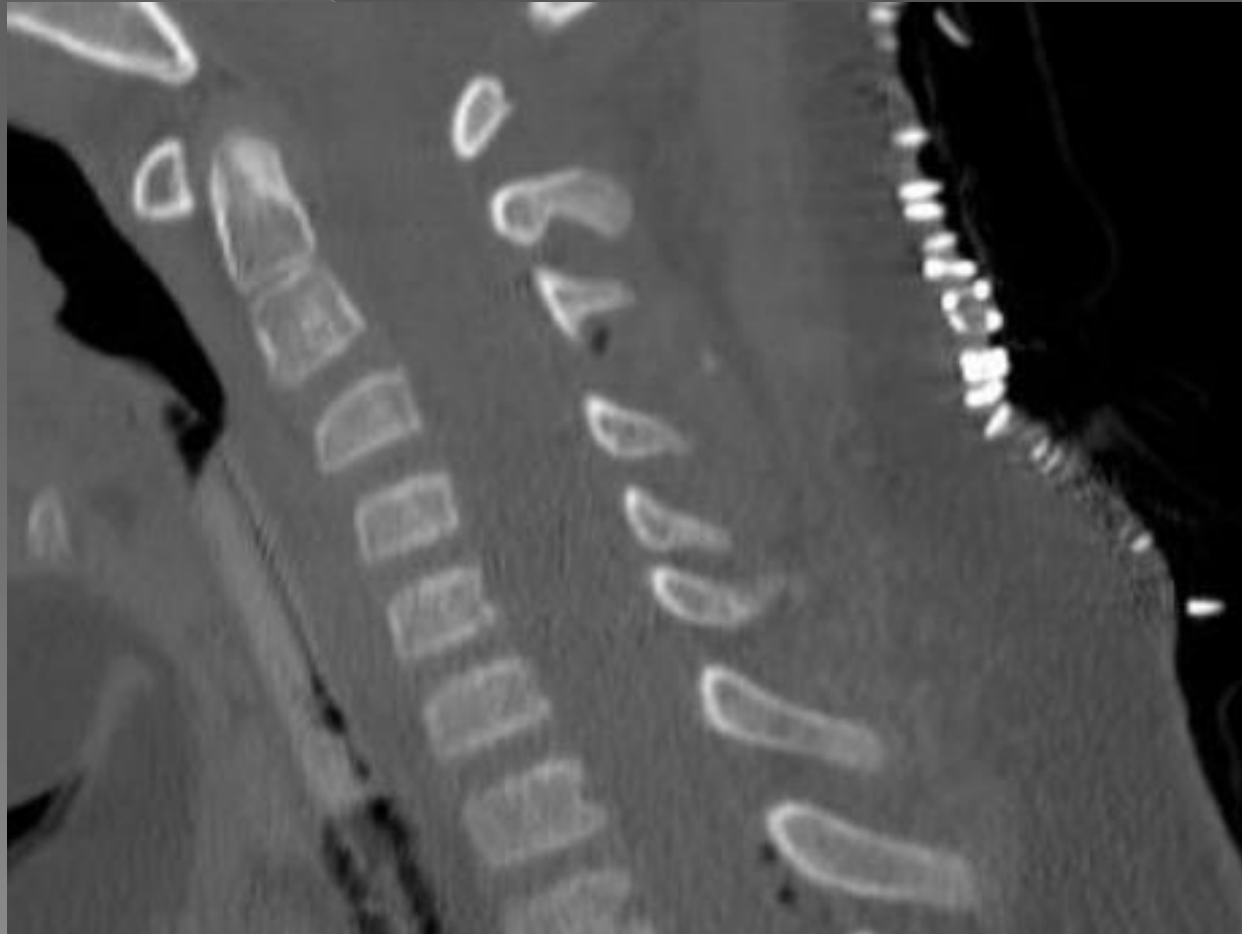
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CONCLUSIONS:

AT OUR INSTITUTION EXPERIENCE , OSTEOPLASTIC LAMINOPLASTY AND LAMINOTOMY WAS NOT ASSOCIATED WITH POST OPERATIVE SPINAL DEFORMITIES IN PATIENTS UNDERWENT SPINAL CORD TUMOR RESECTIVE SURGERIES.

LONGER TERM FOLLOW UP IS WARRANTED TO DEFINITELY ASSESS THE LONG TERM EFFECT OF OSTEOPLASTIC LAMINOPLASTY & LAMINOTOMY.

THANK YOU