

Distal Femur Parosteal Osteosarcoma Excision & Reconstruction

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Musculoskeletal Oncology

Agenda



01

Introduction

Learn a little about your presenter

02

Case Introduction

Details about the diagnosis and patient history

03

Surgical Treatment + Recovery

Details of the operation and patient's immediate clinical outlook

04

Overview and Conclusion

Quick summary of surgery, and things that could have gone differently





01

Introduction



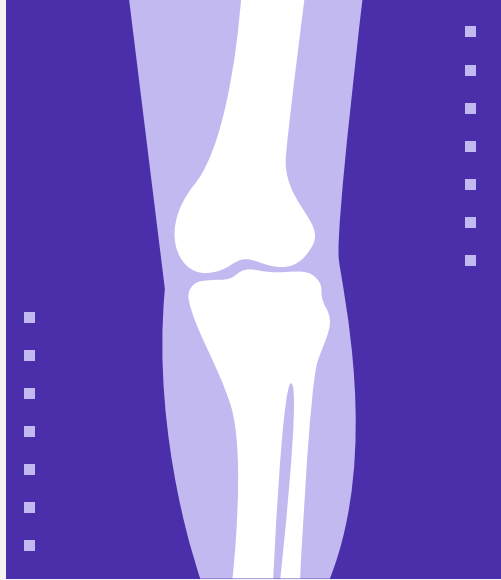
Background

- From Bloomfield Hills, MI
- Currently a Junior at Brown University

Why Orthopedics?

Orthopedics captures my interest from both an athletic and personal perspective.





02

Case Introduction



Patient: J.D

HPI: 32 year old male presents a mass on the L distal posterior femur.

PMHx: low grade-parosteal osteosarcoma

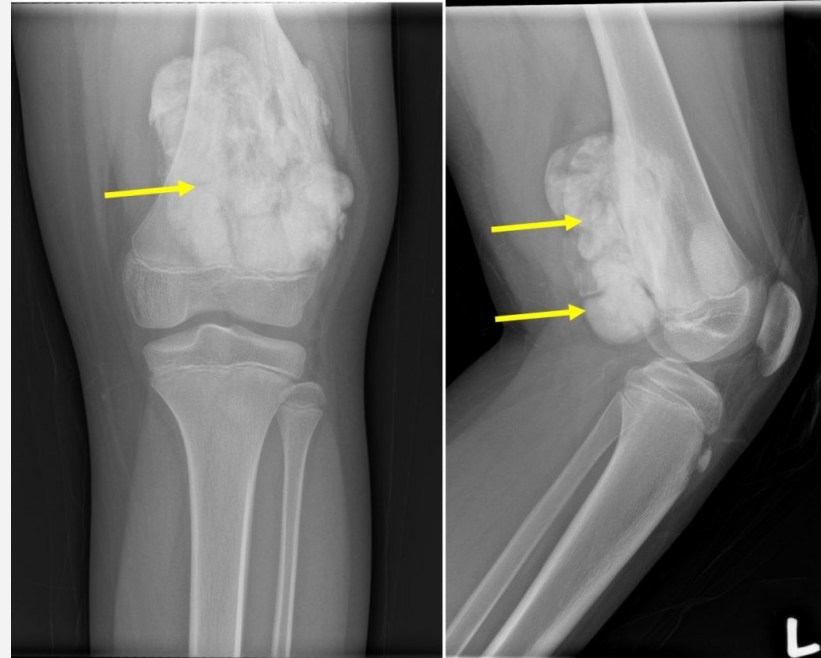
PSHx: Resection of initial mass

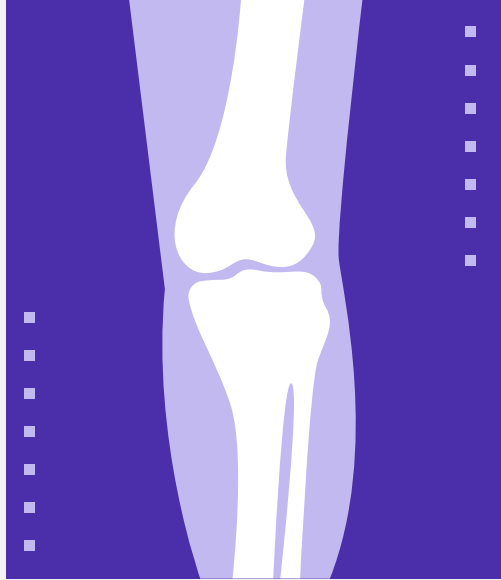
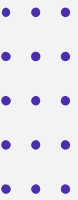
Exam: Presented with decreased range of motion in flexor and extensor mechanisms of the right knee.



Dx: Parosteal Osteosarcoma (2nd Recurrence)

- Malignant tumor that occurs on metaphysis of long bones.
- More common in females, ages 30-40.
- Recommended Imaging: X-ray, CT, MRI.
- Chemotherapy and radiation are not effective. Surgical options work best.





03

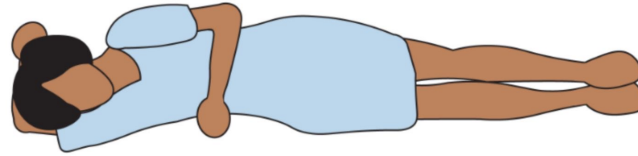
Surgical Treatment

Excision of parosteal osteosarcoma & reconstruction of distal femur via allograft

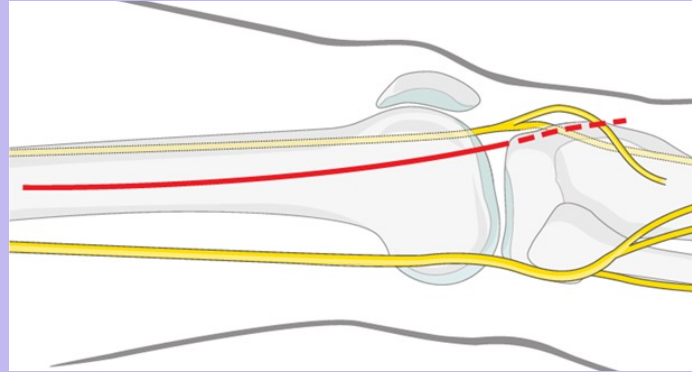


Approach

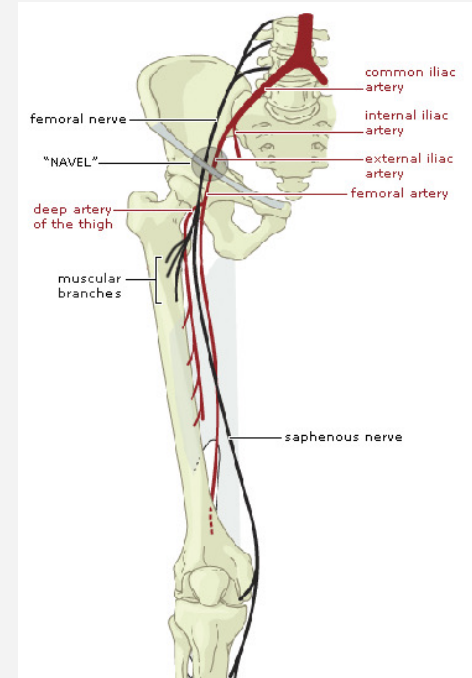
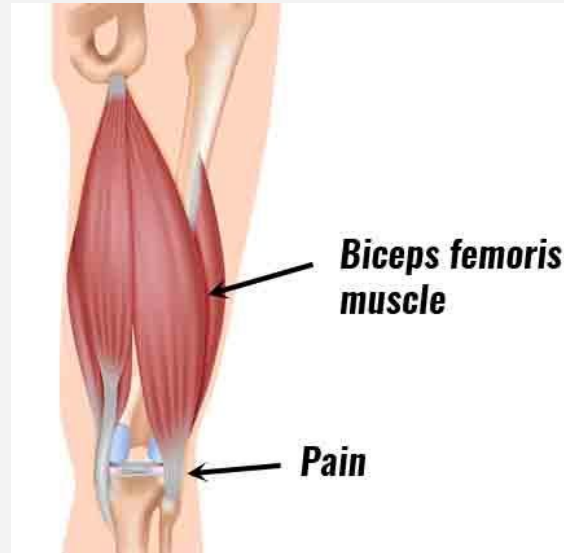
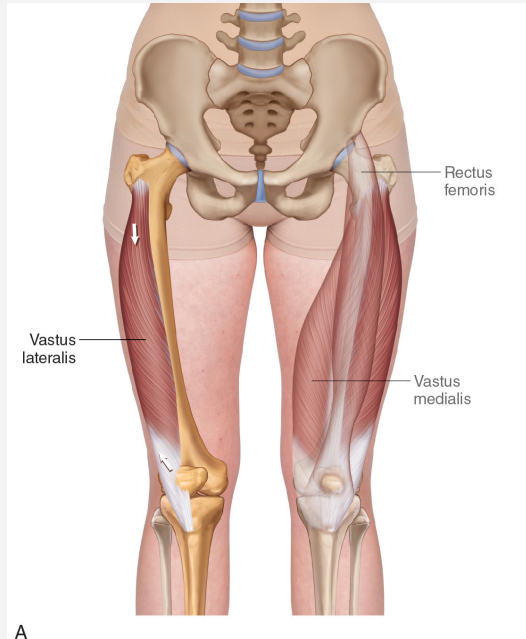
Surgical Treatment



Right Lateral Recumbent

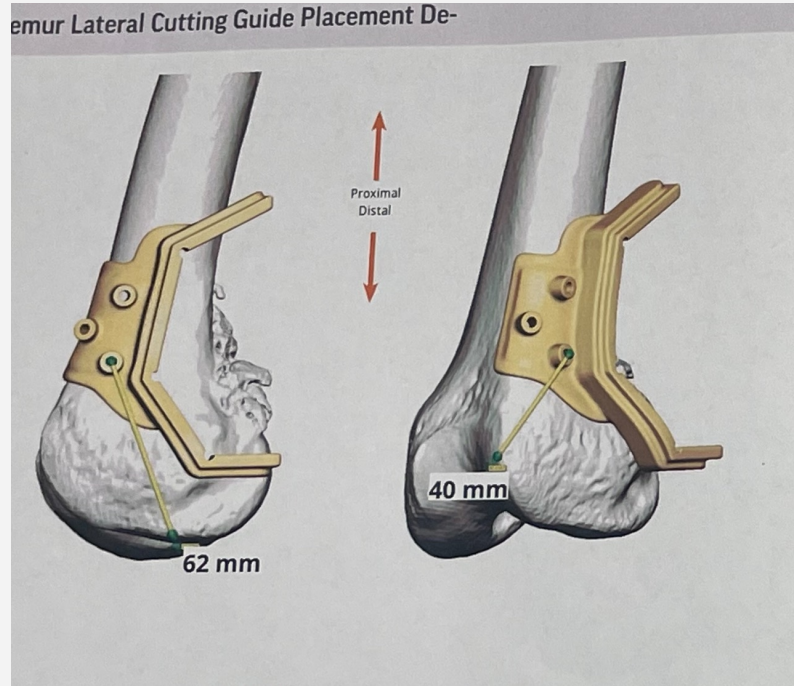


Approach Continued

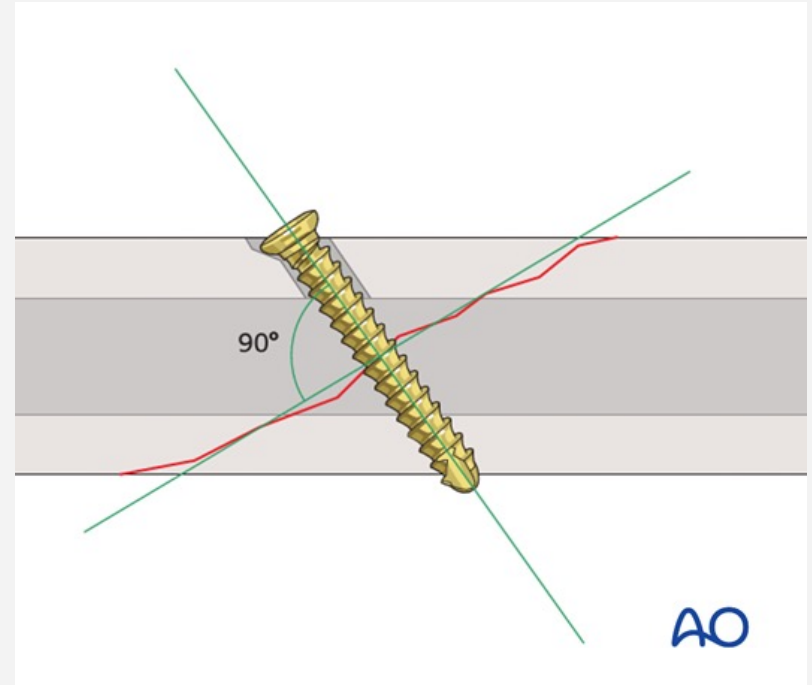




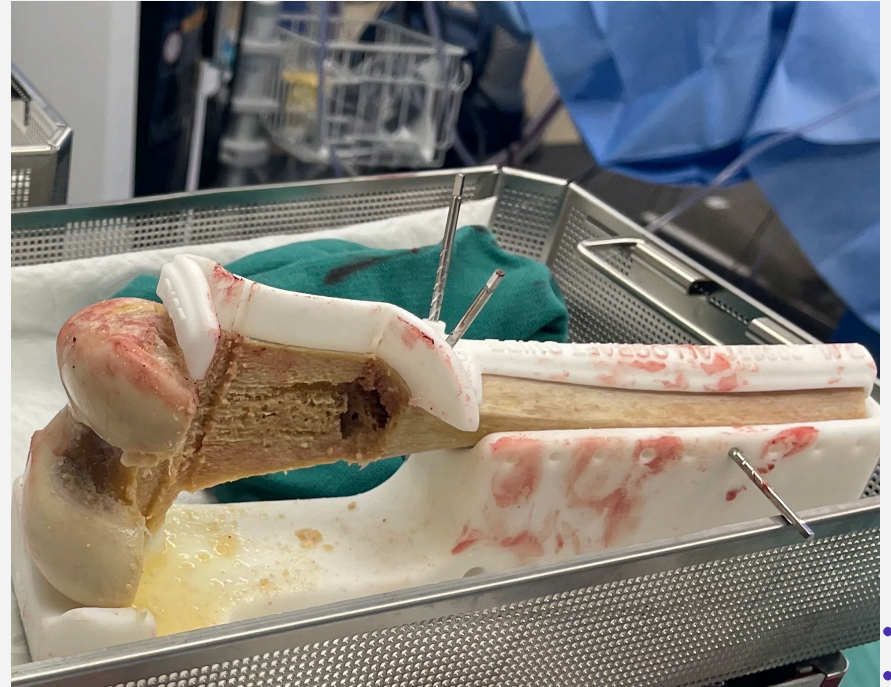
Important Tools



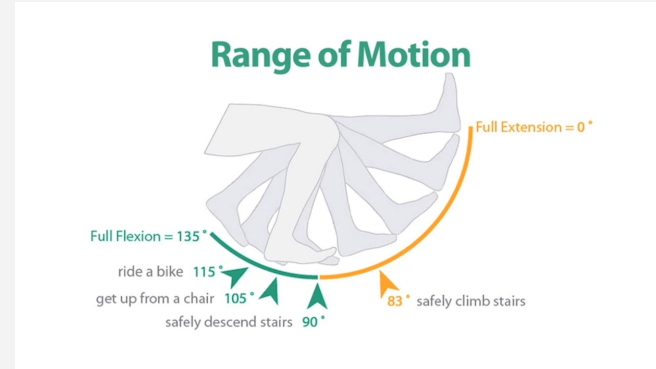
OOPS

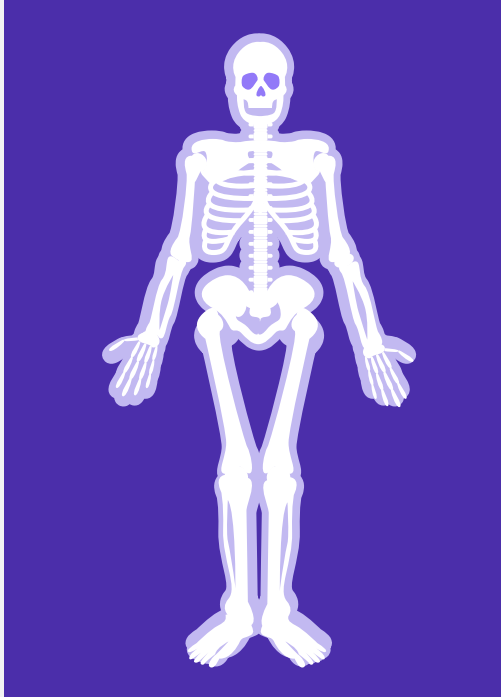


Excision -> Reconstruction



Indications of Procedure





04

Overview and Conclusion

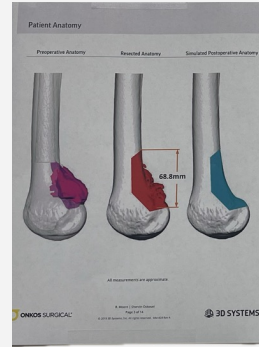


Overview: Excision of the Mass and Reconstruction via Allograft

Create lateral or medial incision from distal femur to knee joint



Remove allograft from saline bath, and place in allograft cradle to be cut.



Using guided system such as onkos, measure and saw off the diseased bone.



Using plates a screws, secure the allograft in place of the parosteal osteosarcoma.

Recovery

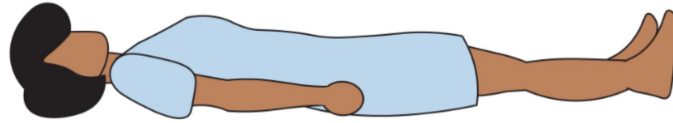
- 50% partial weight bearing for 4 weeks with active movement of knee
- After 4 weeks, WBAT with both active and passive movement of knee
- Follow up with Physical Therapy

Post-Op Visits

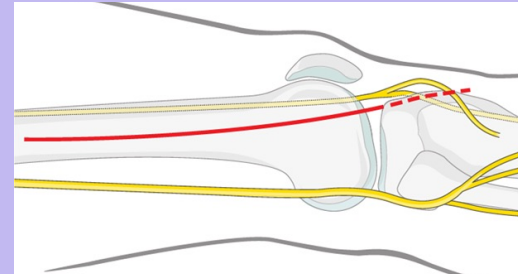
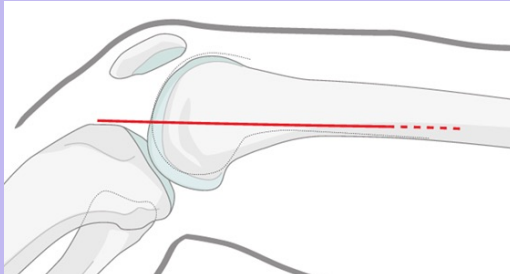
- Scan area of excision, lungs, liver, and brain.
- Ensure range of motion is progressing normally.

Lesson Learned

Surgical Treatment



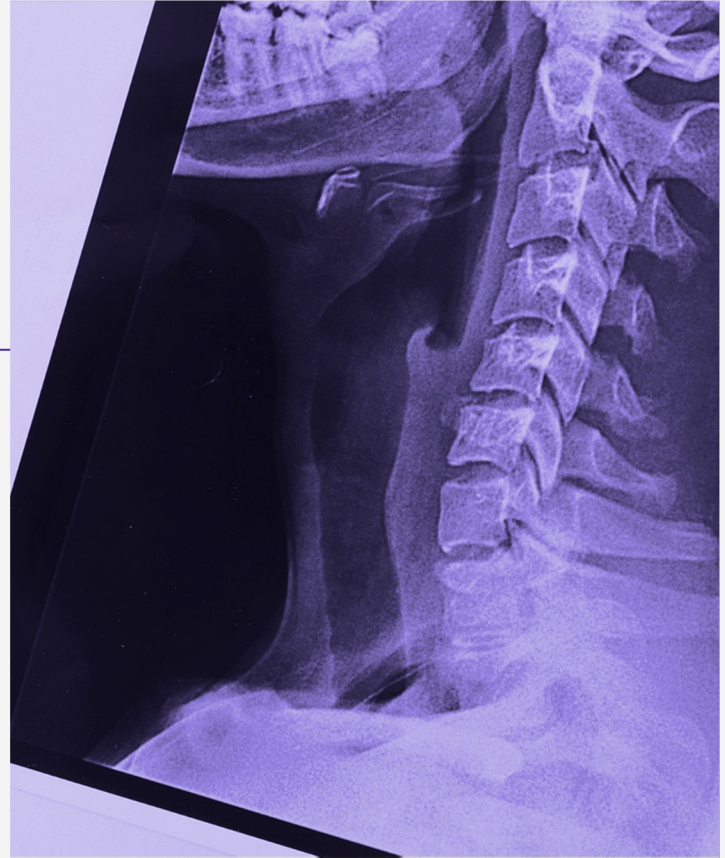
Supine



CONCLUSION

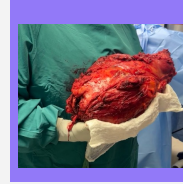
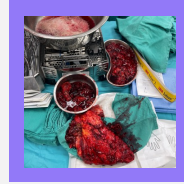
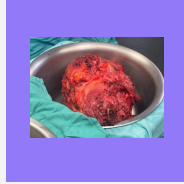
This procedure was a joy to observe, it exposed me to numerous new topics in medicine while demonstrating how surgery can be tailored to your liking.

This shadowing experience has been truly amazing, I feel really confident that I want to do orthopedic surgery and now I have more support and that will help me get there.





THANKS!



A huge thank you to all the program directors and attendings involved in making this experience possible. A special thank you to Dr. Oskouei, Dr. Pipkin, and Dr. Sledd for such a unique learning experience in observing this procedure!





References

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