

Patient Positioning for BolusECT

Webinar for .decimal

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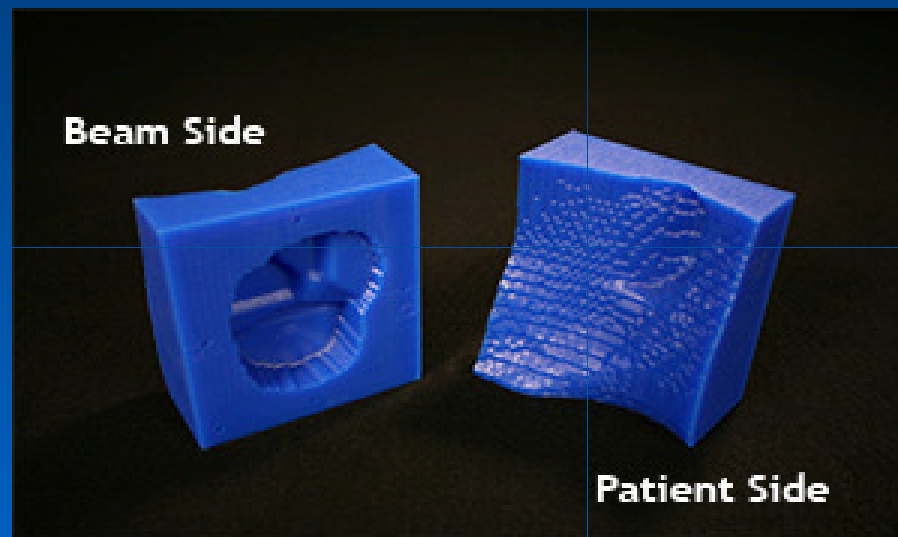
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Introduction

- Identifying BolusECT Patients
- Patient education
- Initial CT
- Verification CT
- First day of treatment
- Examples
- Tricks and Tips
- Conclusion

Patients Identified for BolusECT

- Patient selection
 - Physician identifies patient at time of consultation
 - Physician consults with physics
 - Physics consults with patient

Patient Education

- Skin care
- Multiple appointments needed for QA
- Additional time needed in treatment room
- Physics will be in the treatment room observing weekly (or more depending on case)
- Physician will be in the treatment room more frequently than usual

Initial CT/Patient Positioning

- Patient is immobilized in a reproducible position, based on the area that is being treated
- Immobilize patient in vac-lok and or aqua-mask as appropriate

Initial CT/ Patient positioning

- The BolusECT will be conformed to the patients anatomy, and needs to be as flush as possible to the surface you are treating.
- It's important to make sure they are in a position they will be able to maintain everyday for treatment.

Initial CT/ Patient positioning

- Position patient so the beam can be as perpendicular to the patient as possible
- Place BB's at isocenter on the patient in scanning position.
 - Shifts will be given according to plan made by physician and physics team- to be utilized at the second scan.
- Make sure to scan at least 5cm above and below the treatment area.
- Schedule to return post planning and BolusECT delivery

BolusECT Verification CT/ Quality check

- Set up patient as positioned in initial CT
- Shift according to the plan from physics to new isocenter
- With the aid of the MD and physics team, place BolusECT
 - If there is a mask, it should be cut out at this point
 - Align BB's located on the BolusECT to the lasers
 - This ensures BolusECT is straight
 - Check that there is no space between the skin and BolusECT
- Rescan patient
 - Scan 5cm above and below the area
 - Physics will need to develop new plan based on this simulation with BolusECT in place
 - Schedule patient to return- post planning



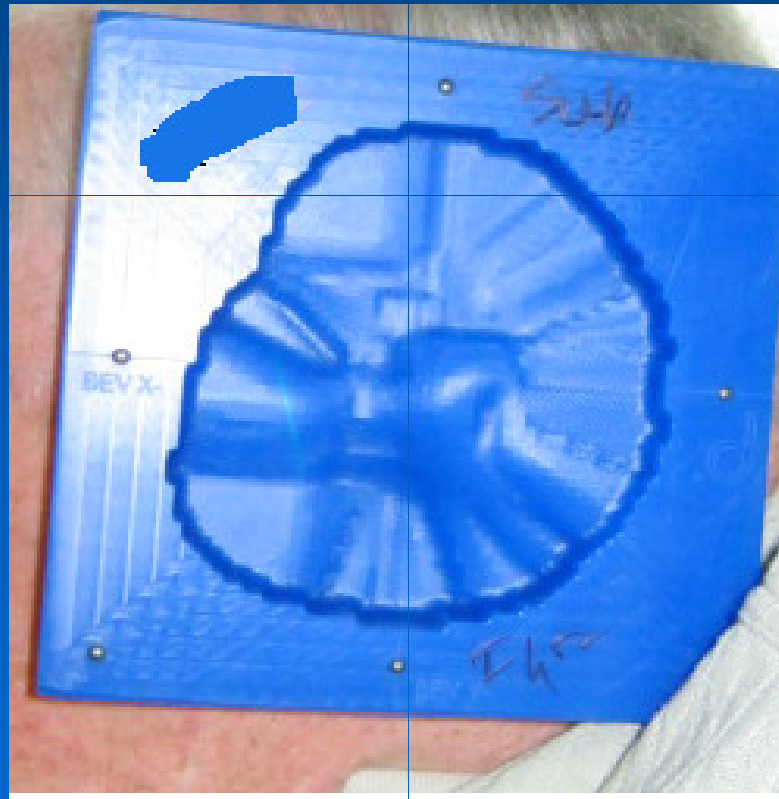
Make sure there is no gap between the surface and BolusECT.

BolusECT Verification CT/ Quality check

- Document set up with pictures and detailed, descriptive notes in the patients chart.
- Label BolusECT to ensure proper positioning.

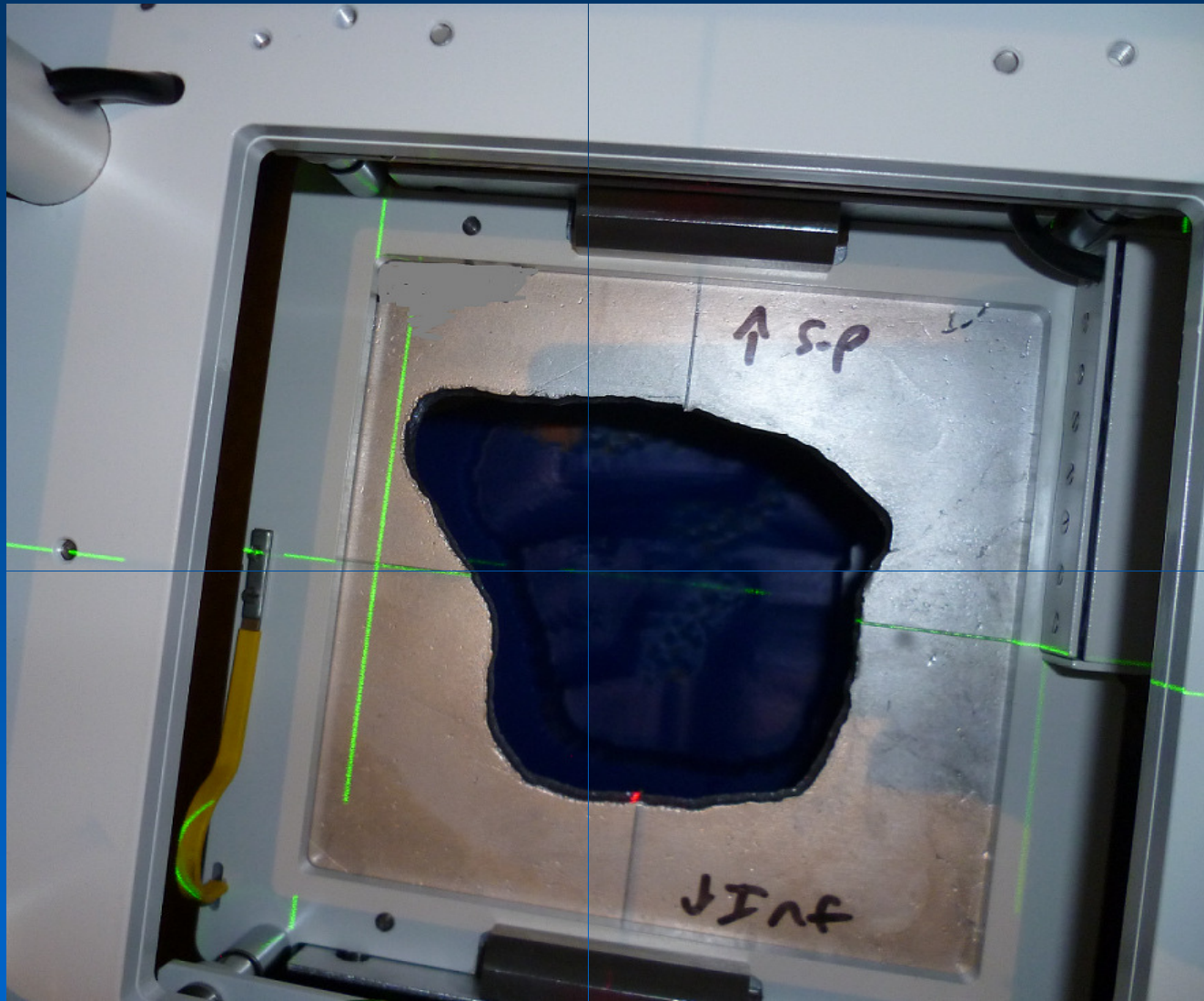
Linac verification simulation/ First day of treatment

- ECT bolus has 5 bb's (one on each side and corner).

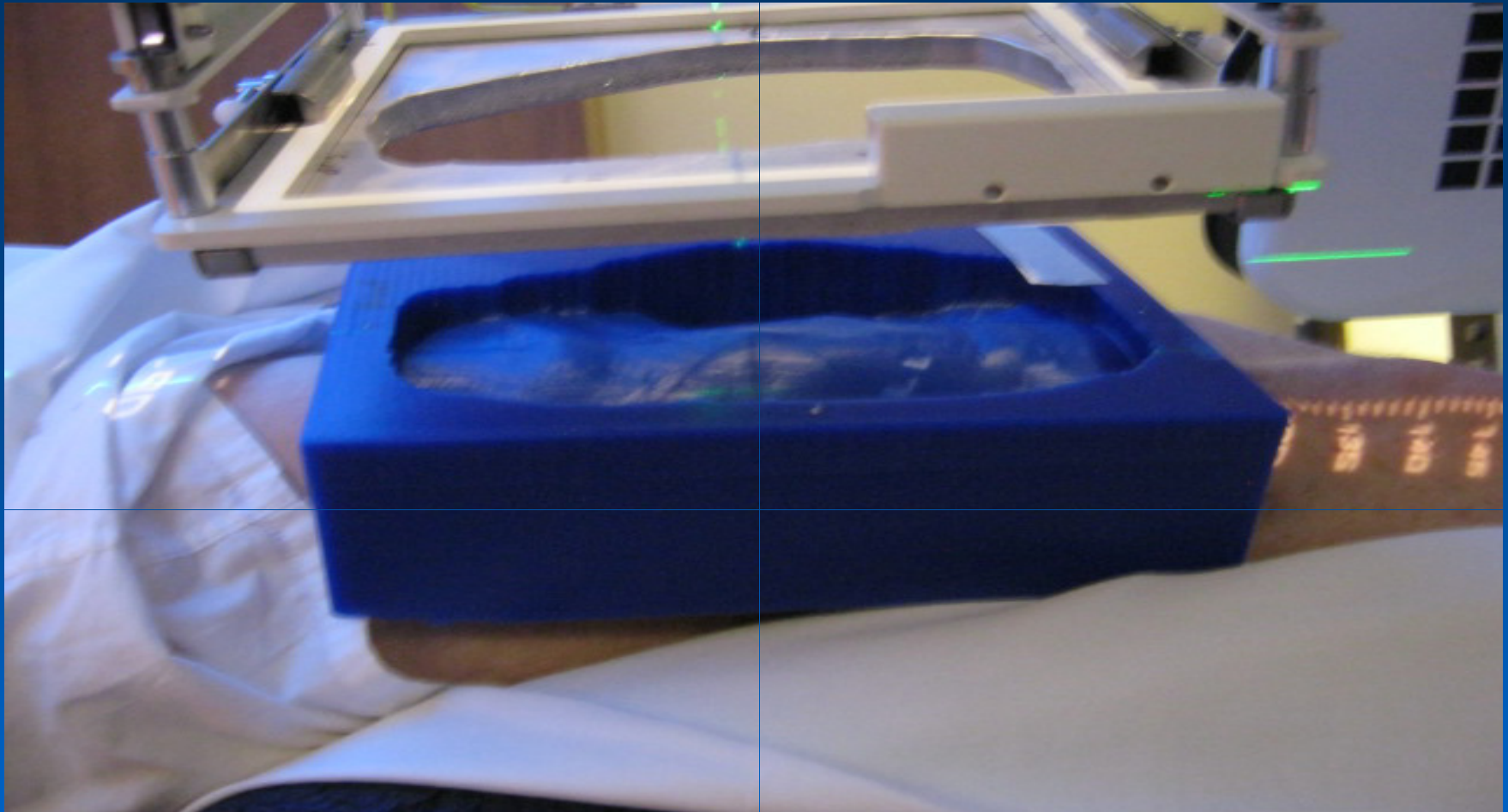


Linac verification simulation/ First day of treatment

- Review patients chart and notes
- Make sure all pertinent staff are available
 - Physics, physician, therapists
- Position patient according to set-up
- Place BolusECT
 - Align BB's to lasers
 - Align electron cutout to BolusECT
 - Ensure no gaps/spaces between patient and BolusECT
- Set up approved by physician prior treatment



Electron cutout aligning with BolusECT



Electron cutout aligning with BolusECT

Examples

- Eye
- Ear
- Head and Neck
- Thigh
- Finger
- Chest Wall
- Nose

Examples - eye

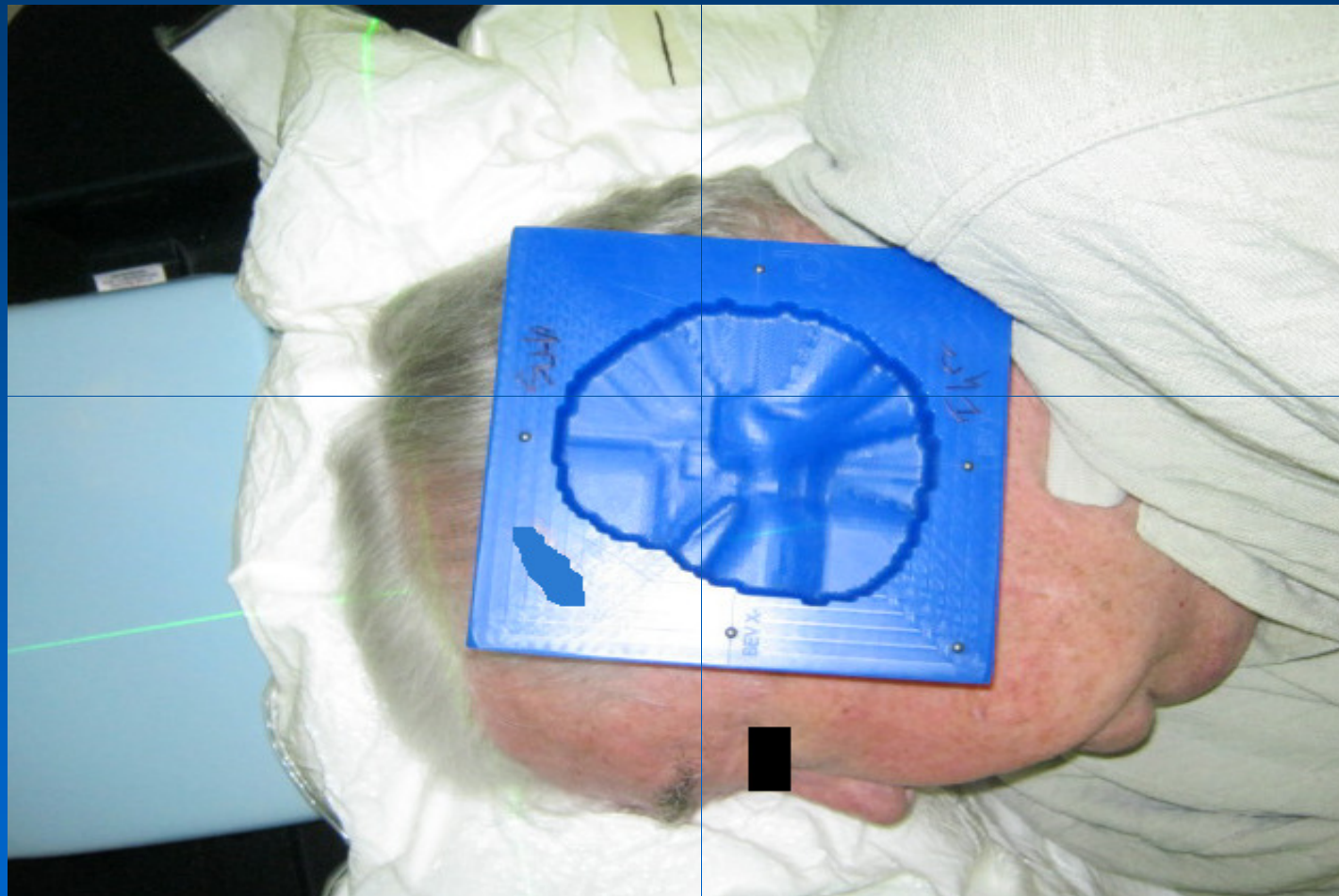


Vaclok made for immobilization, head turned to create flat surface

Examples - ear

- Having the patient lay on their side, if possible, is the easiest.
- Having the patient turned to the opposite side creates a flat surface to place the BolusECT making a very reproducible daily setup.

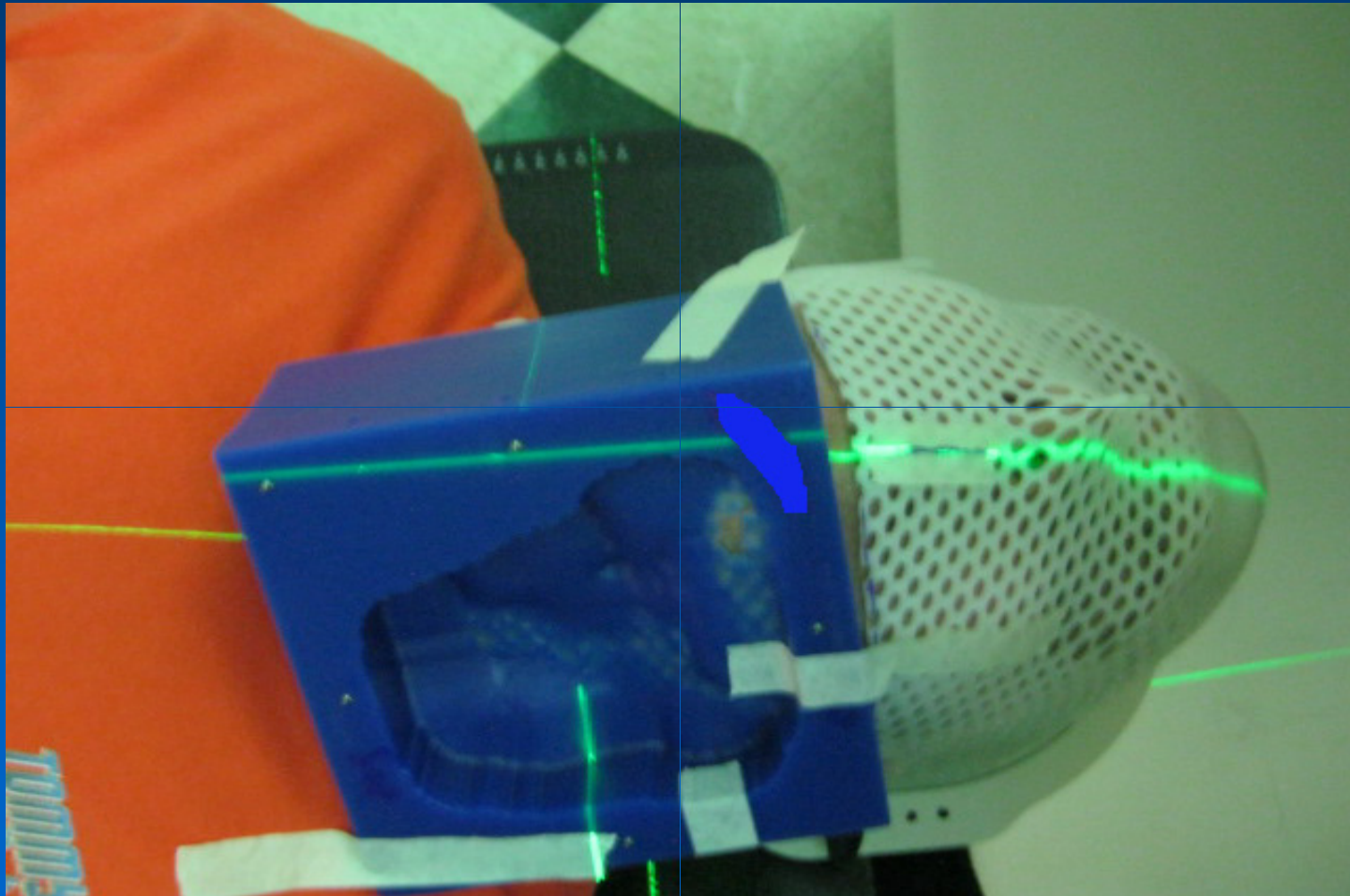
Example - ear



Examples – H&N

- Immobilize the patient in a short aquaplast.
- Cut out the area of treatment.
- Affix BolusECT to open area daily.

Examples – H&N



Example – leg/thigh

Make sure you alert your physics/dosimetry of the pt orientation, prone/supine, feet first/head first.



Example – leg/thigh

You can tattoo either end of the border of the ECT bolus as a reference of the placement

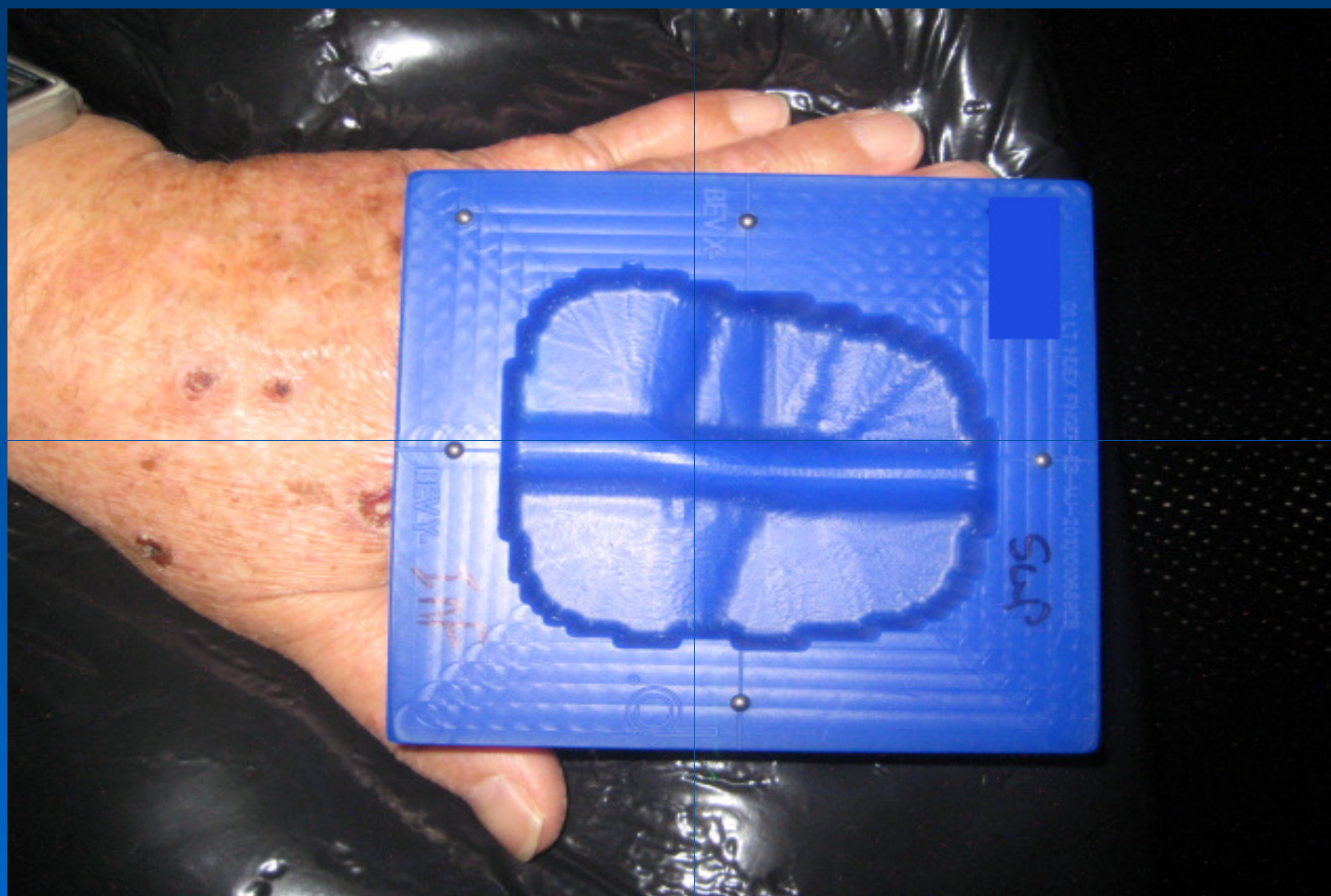


Example – leg/thigh



- Immobilize legs in long vaclok
- Document rotation of the leg

Examples - finger



Examples - finger

- Mold made for hand
- Affected finger spread away from the rest
- Patient position can vary based on patient comfort and ability to move with approval of physics and physician.

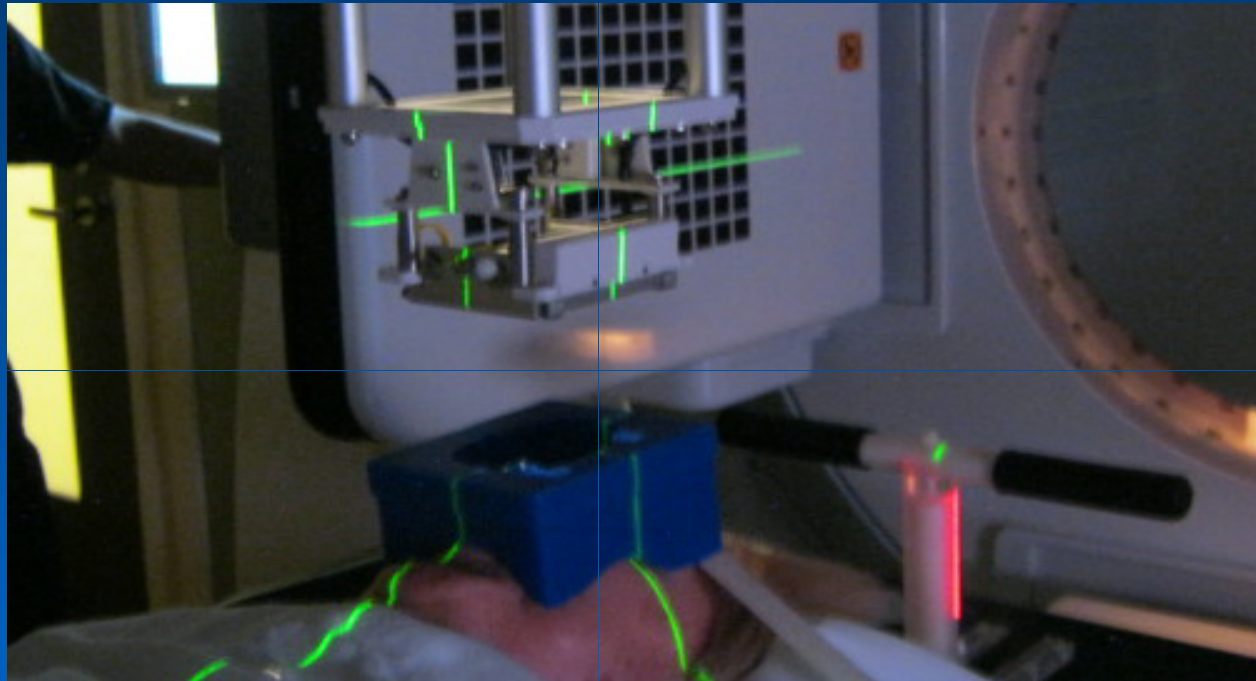
Examples – Chest Wall



Examples – Chest Wall

- Patient supine
- Upper vaclok
- Rotated with a kneesponge under her side to obtain a flat surface
- Arm raised out of treatment field

Example - Nose



- Patient supine with head immobilized in vaclok
- Forehead taped

Do's and Don't

- Don't be afraid to ask questions
- Call Physician, Physics or .decimal if any questions of BolusECT fit arise.

Do's and Don'ts

Be careful when handling the BolusECT. The center can be very thin and fragile. Handle the BolusECT by the edges when working with it.



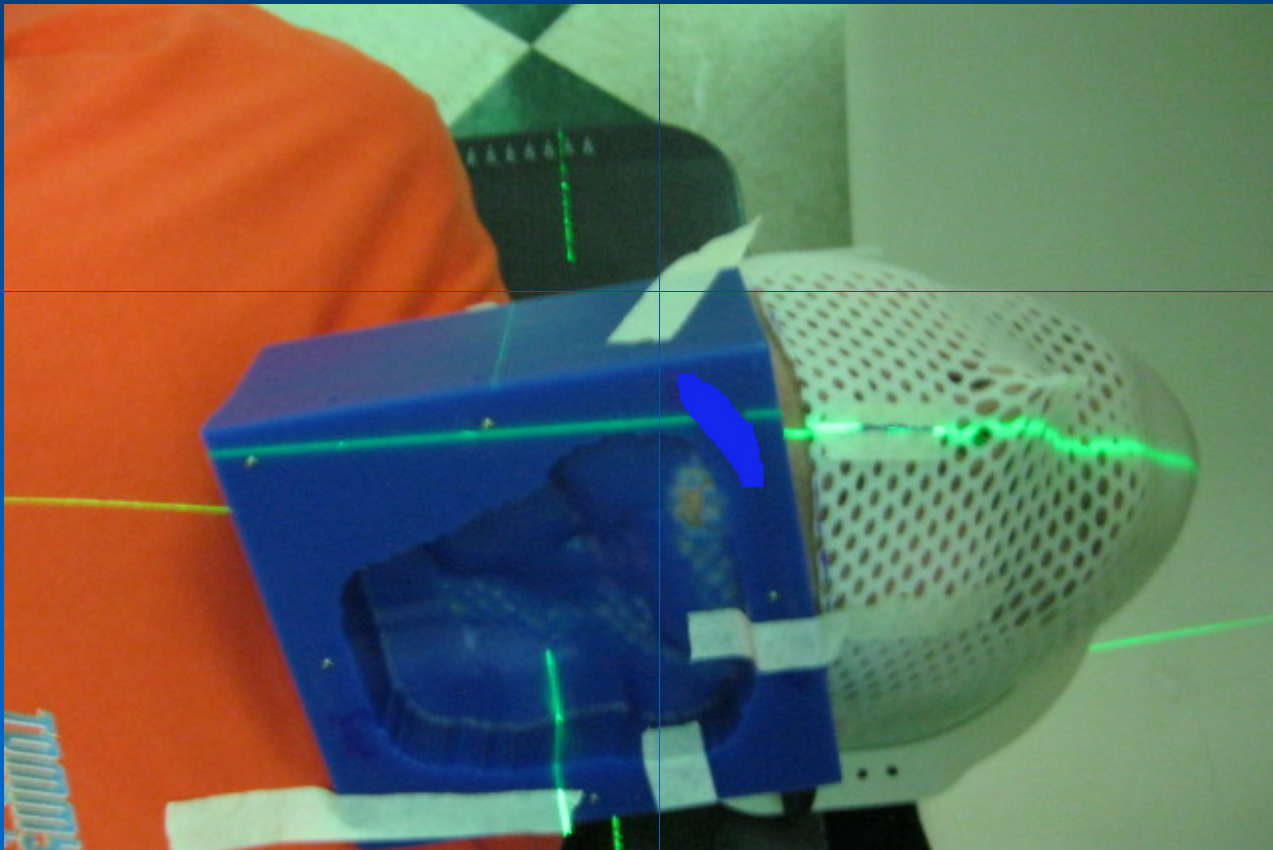
Tips and Tricks



Outline field with sharpie daily.

Tips and Tricks

If surface isn't completely flat, use tape to keep it in place.



Summary

- Reproducible patient position is vital.
- Patient education is key in compliance in treatment.
- Time for initial CT, verification CT, and linac verification simulation are important to ensure quality steps are followed.