



# MASKLESS SETUP WITH ALIGNRT AT SATASAIRAALA – STAFF EXPERIENCE



# FLOW OF THE PRESENTATION

- Introduction
- Our story with SGRT
- Maskless setup and patient case's



# OUR DEPARTMENT IN SATASAIRAALA

- Department was established in 2006
- 13 radiotherapist's, including head nurse
- 2 physicist's and 1 oncologist
- Two TrueBeams and GE CT
- AlignRT on both TrueBeams's and SimRT  
(MapRT pending)

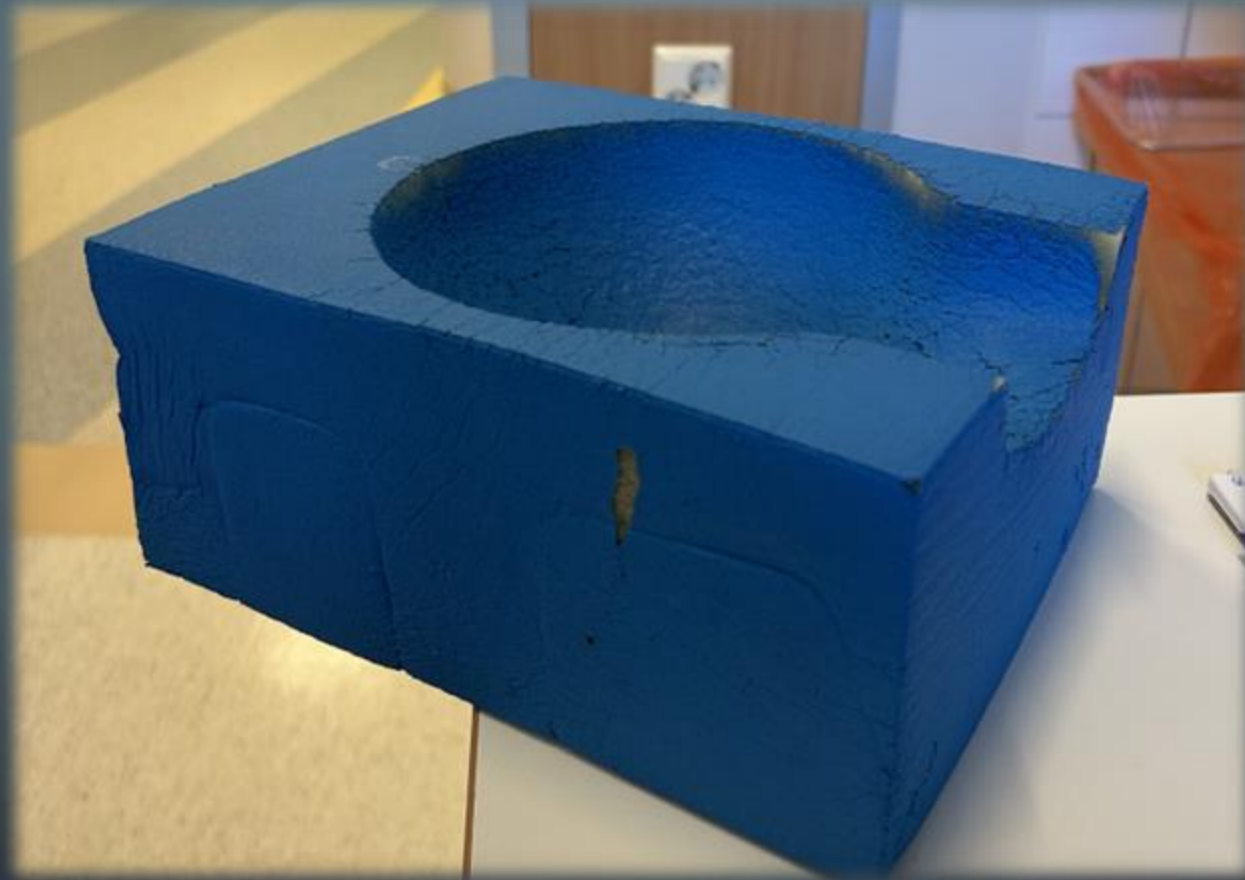


# OUR ADVENTURE WITH VISIONRT

- SGRT was introduced to us in spring 2022
- After installation and on site –training AlignRT and SimRT were immediately put in the practise
- At the same time tattoo's became only an distand memory from a less civilized age



# OUR SECRET WEAPON





# MASKLESS SETUP WITH ALIGNRT

## Intake criteria

- Co-operability
- Every case is individually assessed and the fixation is decided by multidisciplinary team (oncologist, physicist and radiotherapist)
- In total 12 patient's since last summer



# MASKLESS SETUP WITH ALIGNRT

- Our ROI is still figuring out itself, but usually we make “Zorro-mask”
- Positioning is a combination of Postural Video, Delta’s and Deformation
- SGRT protocol
  - It gives Beam Hold Delay time zero but we usually use 1s or in some case's 2s
  - Tolerance +/- 0.2 cm, also +/- 0.1cm have been tested
- Standard scheduled treatment



# MASKLESS SETUP WITH ALIGNRT

## Analysing method's

- Couch correction average's after imaging for every fraction (ARIA+Excel)
- Tolerance variation during treatment according to AlignRT reports

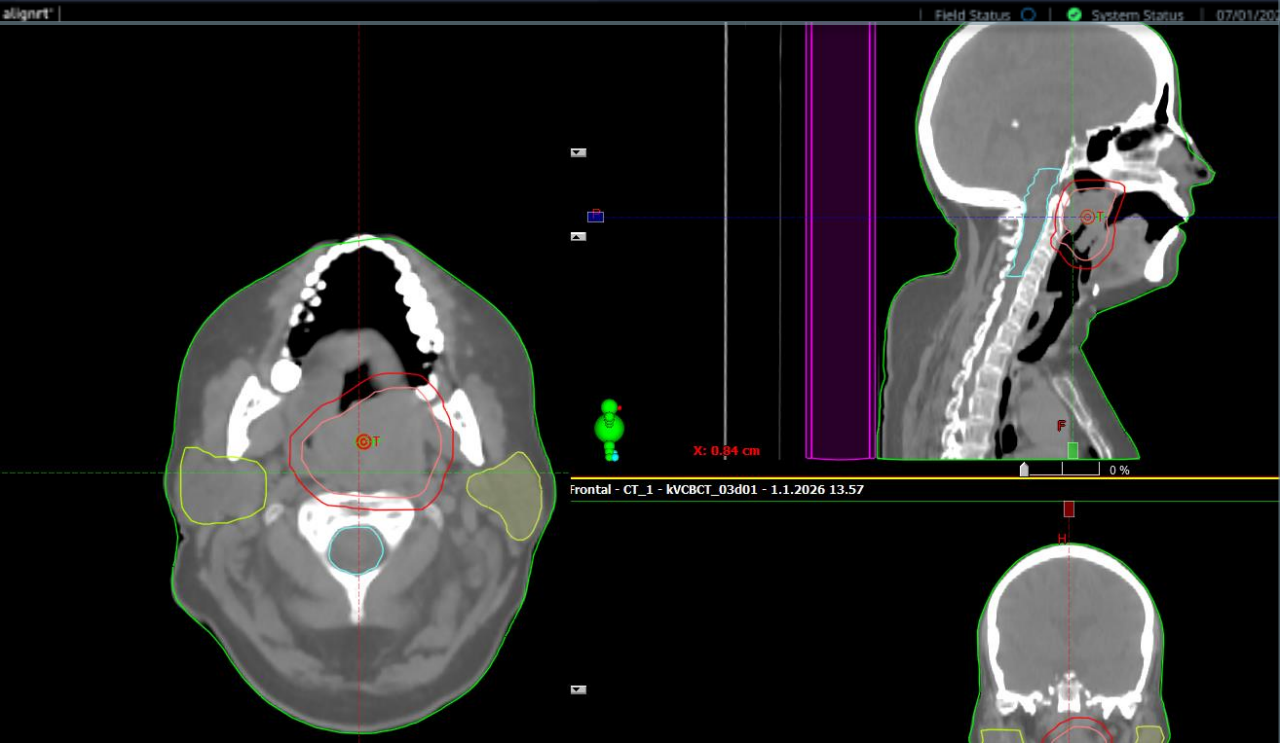


# PATIENT CASE 1

- 45 year old woman
- Non H-lymphfoma
- Nasopharynx 4x4 Gy + 3x3 Gy
- Two Static Field's



- No RTD's out of tolerance during treatment

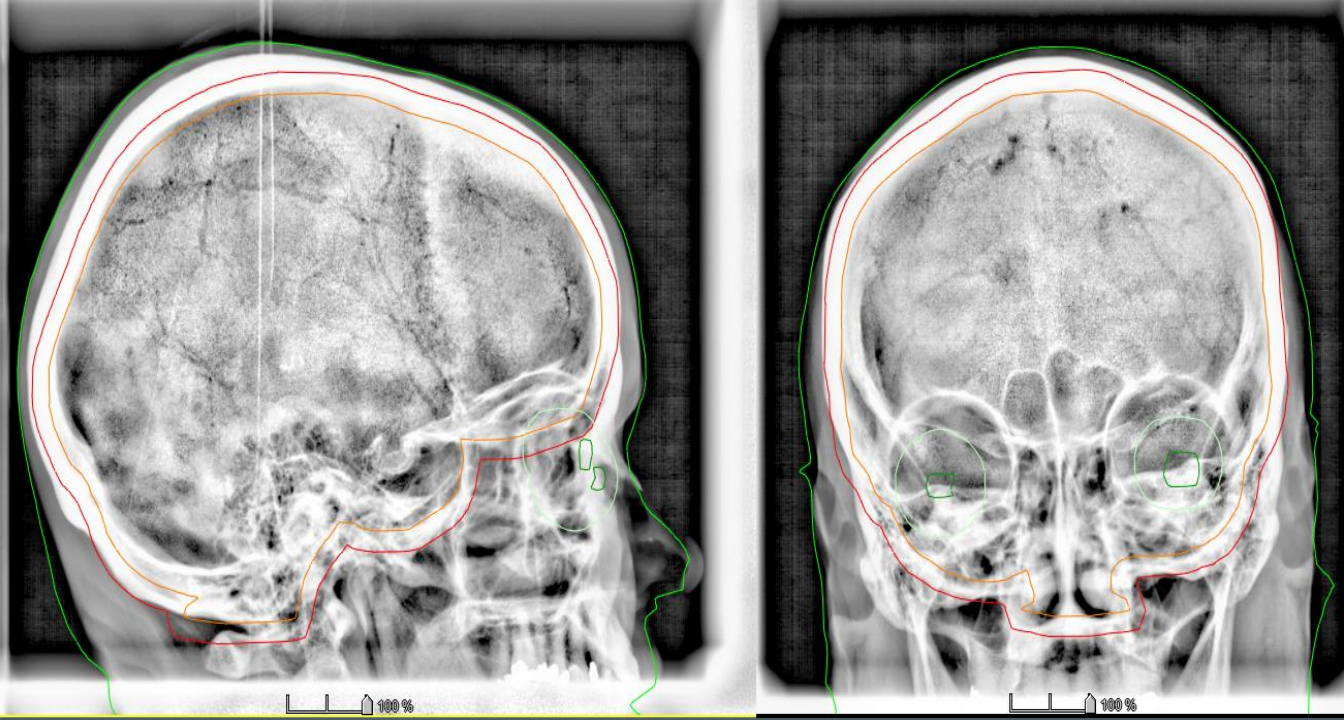


- Vrt -0,17    Lng -0,11    Lat -0.03



## PATIENT CASE 2

- 74 year old woman
- Met. Breast Cancer
- WBRT 5x 4 Gy
- Two Static Field's



- No RTD's out of tolerance during treatment

- Vrt -0,01 Lng 0,04 Lat -0,01

VRT <sub>cm</sub>	0.00	
LNG <sub>cm</sub>	-0.11	
LAT <sub>cm</sub>	-0.02	
MAG <sub>cm</sub>	0.11	
RTN <sup>°</sup>	-0.7	
ROLL <sup>°</sup>	0.1	
PITCH <sup>°</sup>	-0.3	

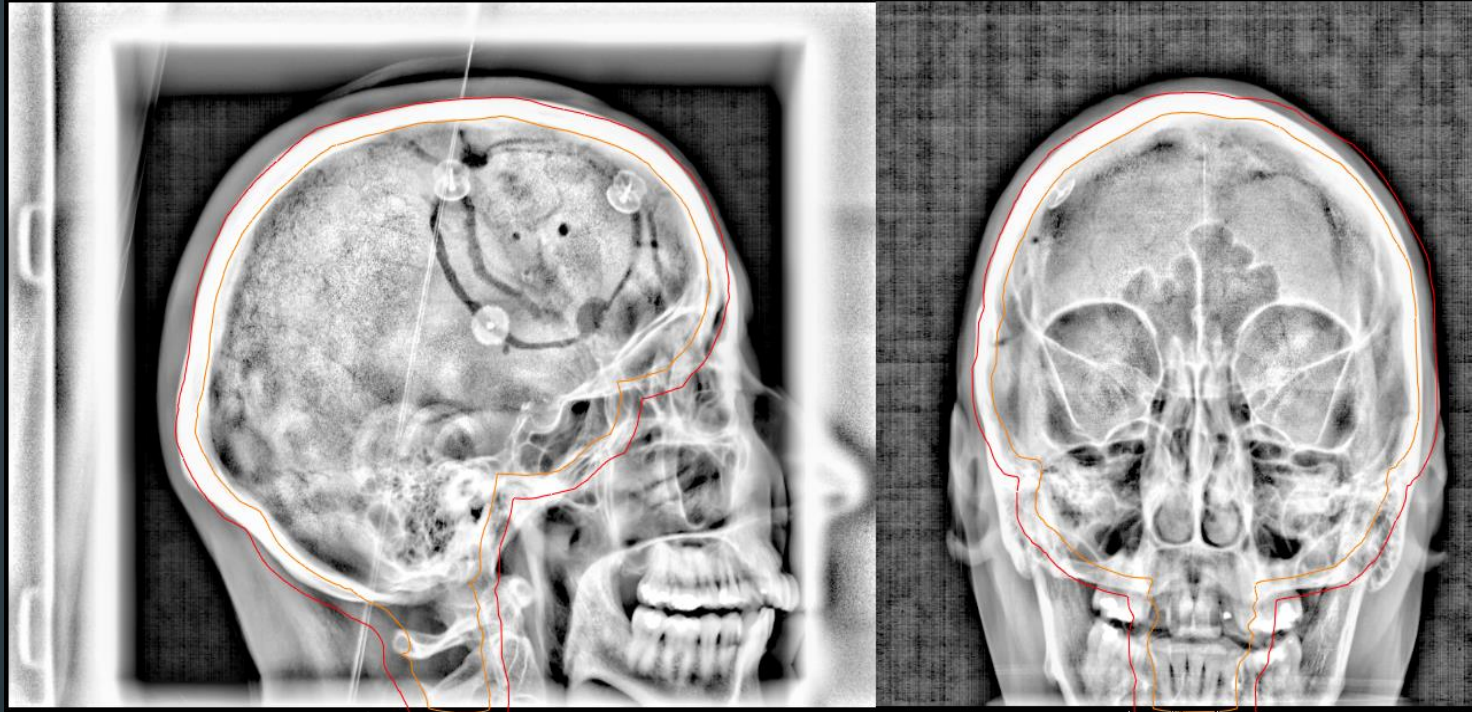
Reference Treatment Couch 0.0° Send to Couch Beam Control

0.20  
-0.20



## PATIENT CASE 3

- 54 year old woman
- Met. Breast Cancer
- WBRT 5x 4 Gy
- Two Static Fields



- No RTD's out of tolerance

- Vrt -0,01 Lng 0,04 Lat -0,01

VRT <sub>cm</sub>	-0.02	
LNG <sub>cm</sub>	0.00	
LAT <sub>cm</sub>	-0.05	
MAG <sub>cm</sub>	0.04	
RTN <sup>°</sup>	-0.4	
ROLL <sup>°</sup>	-0.7	
PITCH <sup>°</sup>	-0.4	

Reference Treatment Couch 0.0° Send to Couch Beam Control OFF

21/11/2025 13:05:07

0.20  
-0.20

Coaching Surface Deformation Video

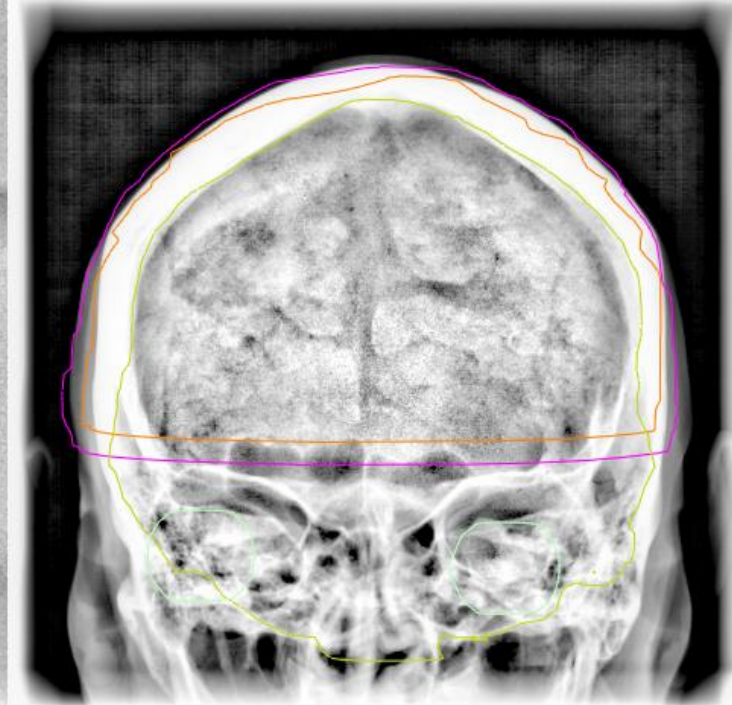
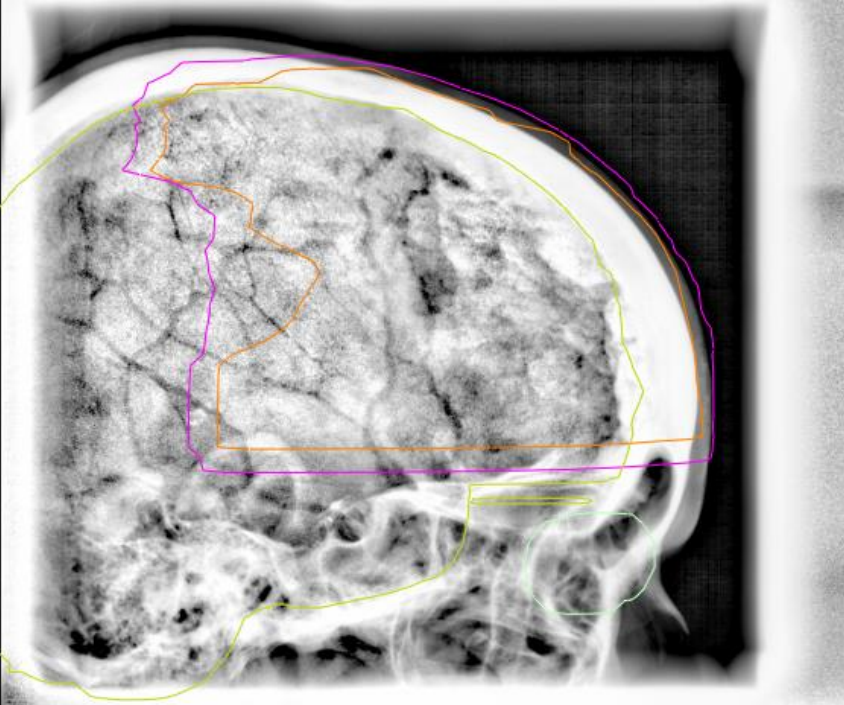
Field Status System Status 21/11/2025 13:06



# PATIENT CASE

## 4

- 60 year old woman
- Met. Breast Cancer
- Frontal Skull 5x 4 Gy
- Two VMAT Field's

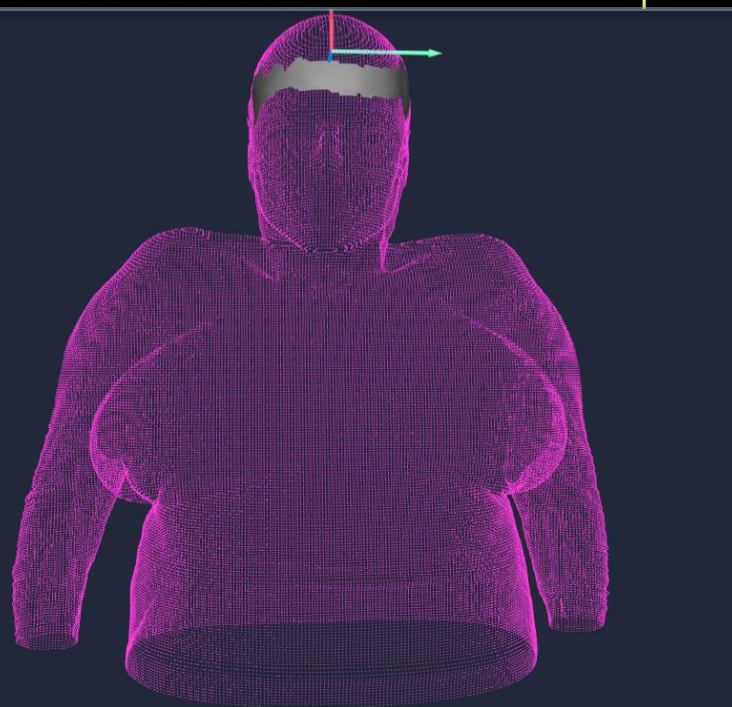


- No RTD's out of tolerance during treatment

Treatment Course

Plan Name Active

- ▶ Th-ranka [Chest]
- ▼ Kallo [Head and Neck]
  - ▼  $\oplus$  ISO 1 [0.0, -120.0, 220.0]
  - ▼ CT SIM BODY 30/10/2025 09:52:28
  - Treat With Beam Control
  - ROI1 [Isocentric]
  -



- Vrt -0,02 Lng -0,06 Lat 0,08



# PATIENT CASE 5

- 57 year old woman
- Met. Breast Cancer
- Multiple brain met. 3x 6 Gy
- Two VMAT Field's

Preparation Treatment holtaja ?

Aivometas. ISO 1 SGRT BODY ROI1

VRT<sub>cm</sub> -0.01  
 LNG<sub>cm</sub> 0.05  
 LAT<sub>cm</sub> -0.06  
 MAG<sub>cm</sub> 0.08  
 RTN° 1.4  
 ROLL° 0.2  
 PITCH° 0.0

Beam Hold Delay (seconds)  
1

Reference Treatment Couch 0.0° Send to Couch Beam Control OFF

25/01/2026 14:57:56

0.32  
-0.32

Coaching Surface Deformation Video

- No RTD's out of tolerance during treatment
- but Center Couch messed up things!

Field Status System Status 25/01/2026 15:25

X: 0.46 cm

Frontal - CT\_1 - WCBCT\_02g01 - 2.2.2026 12.21

- Vrt -0,09 Lng -0,16 Lat -0,07

# PRO'S AND CON'S

## PRO'S

- Cost effective
- Fast at SimCT
- Patient friendly

## CON'S

- Positioning can be little trickier
- Perfect ROI is still figuring itself out
- SGRT camera's sometimes get blocked, but It's easily tackled

## FUTURE PLANS

- Adaptation with the stereotactic table to ease the positioning of the shoulders and enabling more demanding plans



