

PTCOG Ocular 2022 Symposium

Session 6: Patient Set-Up/Delivery and Challenging Cases

A large conjunctival squamous cell ca

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65AAF, PS 1, Large conjunctival squamous cell ca - OS

Hx: "sty" near caruncle, OS x 1 mo
ED visit - steroids/antibiotics

Rec oculoplastic referral

Surgery, excisional biopsy – 2.5 cm
squamous cell ca, + margin

Referred to specialty center

• MRI 3wk post-op – normal

• Started on interferon gtt

6 wk post-op – local recurrence



3 mo post-op: initial visit with tumor specialist

Visual Acuity (Snellen - Linear)

	Right	Left
Dist sc	20/50 -1	20/100 -1
Dist ph sc	20/40	20/50 -2

Tonometry (Tonopen, 10/47 AM)

	Right	Left
Pressure	11	12

Left

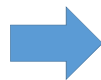
Lid margin sclerosis and lash loss medially, Lid thickening
there is a beefy 5x5 lesion with prominent vascularity arising from 9:00 near the caruncle; inferior and superior symblepharon, brown pigmentation 3 to 7:00

Clear

Deep and quiet

Round and flat

Nuclear sclerosis, Posterior subcapsular cataract

Options

1. Exenteration
2. EBRT (proton)

Initial Consultation at UFHPTI



Treatment options: Further surgery/debulking? Exent? Definitive RT

Eyeline? Gantry? Dose/fractionation? ENI? Gaze fixation? OAR constraints? Systemic therapy?

Management of Invasive Squamous Cell Carcinomas of the Conjunctiva

ALEXANDRA SANTONI, BUIHIE THARIAT, CELIA MASCHI, JOEL HERAUDT, STÉPHANIE BAILLE, SANDRA LASSALLE, MARIE LAURE POYRICHON, JULIA SALLERON, AND JEAN-PIERRE CAUOILLE

45 GyRBE in 8 fractions over 2 wk

Intervention	Number of Patients (%)	45GyRBE - 14	45GyRBE - 16	P value
Medical history				
No previous therapy	62 (84%)	60 (86%)	60 (87%)	
Previous ocular adjuvant	12 (16%)	10 (14%)	12 (17%)	
Previous radiotherapy or surgery	20 (28%)	20 (29%)	20 (29%)	
Intervention				
Exenteration	12 (16%)	10 (14%)	12 (17%)	
Radical conjunctival resection	70 (97%)	68 (98%)	68 (98%)	
Radical conjunctival resection with adjuvant	10 (14%)	10 (14%)	10 (14%)	
Radical conjunctival resection with adjuvant	10 (14%)	10 (14%)	10 (14%)	
Overall stage				
T1	20 (28%)	20 (29%)	20 (29%)	
T2	40 (56%)	40 (58%)	40 (58%)	
T3	10 (14%)	10 (14%)	10 (14%)	
T4	10 (14%)	10 (14%)	10 (14%)	
Stage				
Stage I	20 (28%)	20 (29%)	20 (29%)	
Stage II	40 (56%)	40 (58%)	40 (58%)	
Stage III	10 (14%)	10 (14%)	10 (14%)	
Stage IV	10 (14%)	10 (14%)	10 (14%)	
Overall survival				
Overall survival	100%	100%	100%	
Overall survival	100%	100%	100%	

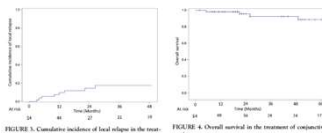
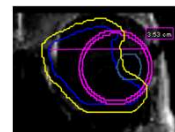
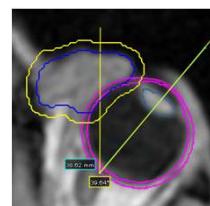


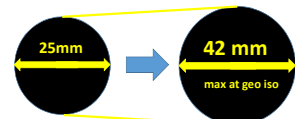
FIGURE 3. Cumulative incidence of local relapse in the treatment of invasive conjunctival carcinomas.

Intervention	Number of Patients (%)	Number of Events	Overall Survival (%)	P value
Target				
Target conjunctival resection	60 (84%)	1	100%	
Target conjunctival resection	60 (84%)	2	100%	

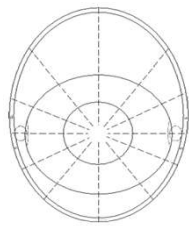
Initial technical challenge: Eyeline target size limit



Eyeline nozzle



Next technical challenge: conjunctival mapping



Central



Peripheral

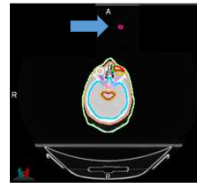
Cornea
Limbus
Bulbar conjunctiva
Fornix
Palpebral conjunctiva
Lid

Next technical challenge: Gaze fixation

Decreased target movement

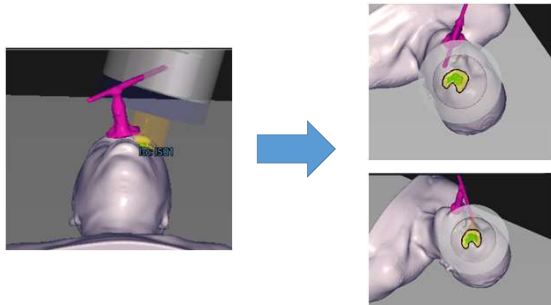
Corneal sparing

Snout clearance?

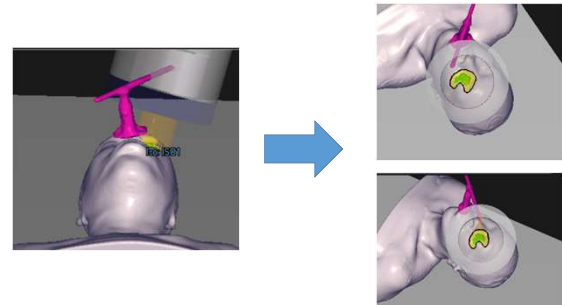


Gantry [deg]	Couch [deg]
30.0	300.0
40.0	330.0

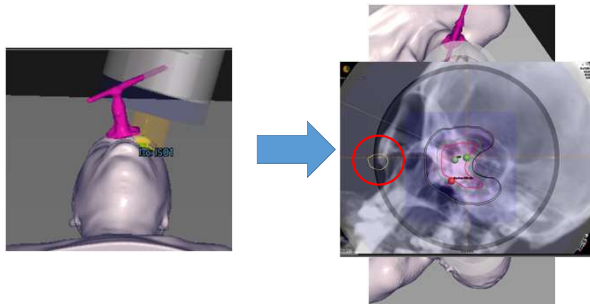
Gazing point ultimately marked on compensators



Gazing point ultimately marked on compensators

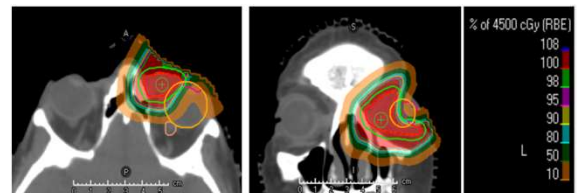


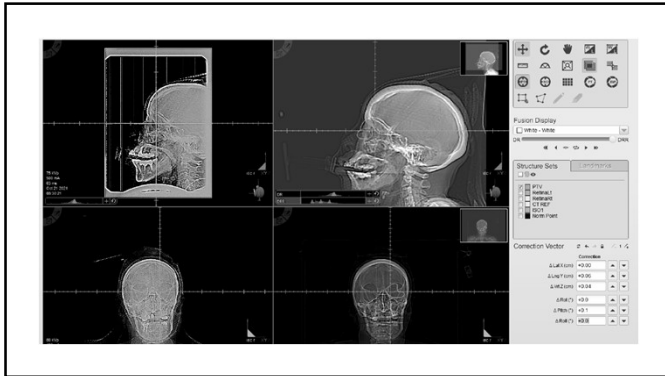
Gazing point ultimately marked on compensators



3D/IG DS proton therapy

563 cGy (RBE) x 8 fx = 4500 cGy (RBE)
Dose at 99.00% volume
■ GTV
✓ Value: 4500 cGy (RBE) ⓘ





5d post-therapy: we decide to add 3 more fx



Plan	Prescription	Fractions				Approved
Left Eye 11 Fractions	61.875 Gy	11				No
Beamsets	Prescription	Fractions	Delivery	Beams	Fx dose	
LeftEye	100% of 61.875Gy/RBE at 99% of GTV	11	DS	2	562.5 cGy	

Date of completion



1 mo post therapy – NED



3 mo post therapy – NED



**PET-CT/MRI orbit – negative
Vision: 20/30 OS**