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Title of the presentation: IMPENDING CAROTID BLOWOUT SYNDROME : UNVEILING A RARE ONCOLOGICAL EMERGENCY

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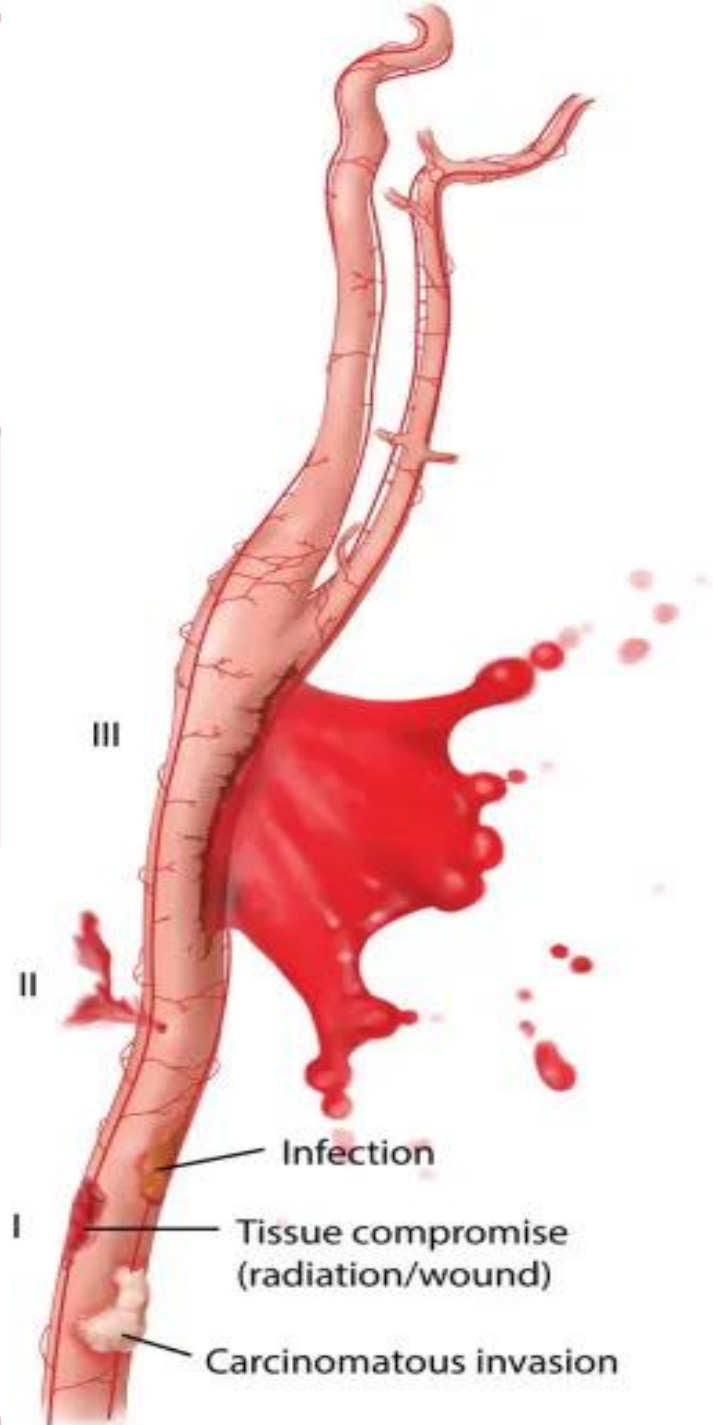


Introduction/ Review of Literature:

- Carotid body syndrome(CBS)is the rupture of the carotid artery and its branches after treatment of advanced head and neck cancer.
- CBS poses a significant challenge due to its rapid onset and potential for catastrophic hemorrhage, necessitating urgent recognition and intervention.
- Incidence - 4.3% (increased risk of 7.6-fold with further radiation therapy)
- Recognizing CBS as a life-threatening complication is crucial for prompt intervention and improved patient outcomes, Category II & III CBS require immediate intervention.

Categories of Carotid Blowout Syndrome

Active Haemorrhage:	Profuse haemorrhage not controlled with surgical packing. Complete vessel rupture.
Imminent Haemorrhage:	Short episodes of sentinel haemorrhage. Complete rupture a certainty.
Threatened Haemorrhage:	Neoplastic invasion or exposure due to wound breakdown. Haemorrhage has not yet occurred. Rupture almost inevitable.



AIMS/ OBJECTIVES:

- To evaluate the effectiveness and safety of endovascular covered stent placement in the management of carotid blow-out syndrome cases.

METHODOLOGY:

- Case set of 3 patients of head and neck cancer who were referred to department of Intervention radiology, HCG Bangalore between 2013-2023 endovascular management after CT carotid angiography.
- Based on the findings two of them were **CATEGORY II** and one was **CATEGORY III**, Bleeding episodes per oral or from neck soft tissue was common symptom.

RESULTS:



- All patients were managed by endovascular covered stent placement across the pseudoaneurysm/ bleeding points.
- Post stent deployment angiogram showed no contrast extravasation into pseudoaneurysm or adjacent soft tissue in 2 patients.
- Slow contrast extravasation noted in case-3 in which balloon angioplasty was done with 7x40mm balloon catheter (Boston scientific, MUSTANG) further no contrast extravasation was noted.
- No neurological deficit was noticed immediately post procedure with no further episodes of bleeding

Representative images:



CASE-1

HISTORY

A 59y old female patient came with complains of mild pain and swelling in right lateral neck region since 1 week.

K/C/O: RECURRENT CARCINOMA HYPOPHARYNX S/P Resection of tumor with gastric pullup and anastomosis & reconstruction with pectoralis muscle flap was done on 14/03/2023

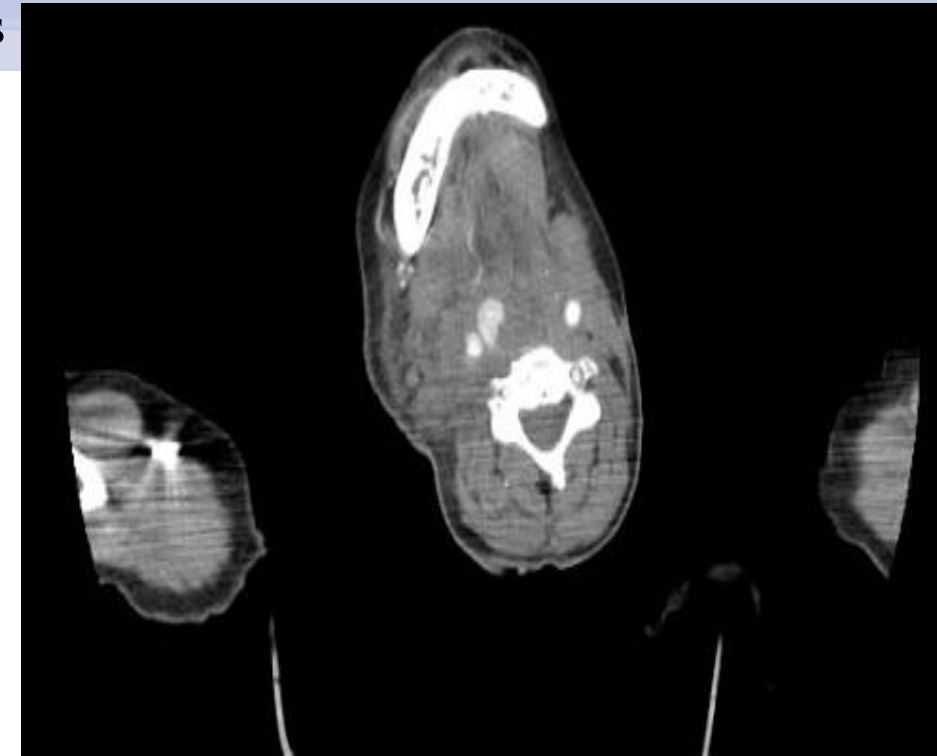
Patient also received 2 cycles of RT on 18/06/23, Follow up PET scan was

IMAGING

CT CAROTID ANGIOGRAM

Interval development of defect along the medial wall of distal right CCA measuring 1.5 x 1.3 cm - S/O Pseudoaneurysm

Further planned for right carotid artery stenting



PRE STENTING



POST STENTING



CASE-2

K/C/O Ca right retromolar region S/P surgery, Chemo & radiation therapy presented with bleeding from cervical soft tissue

PRE

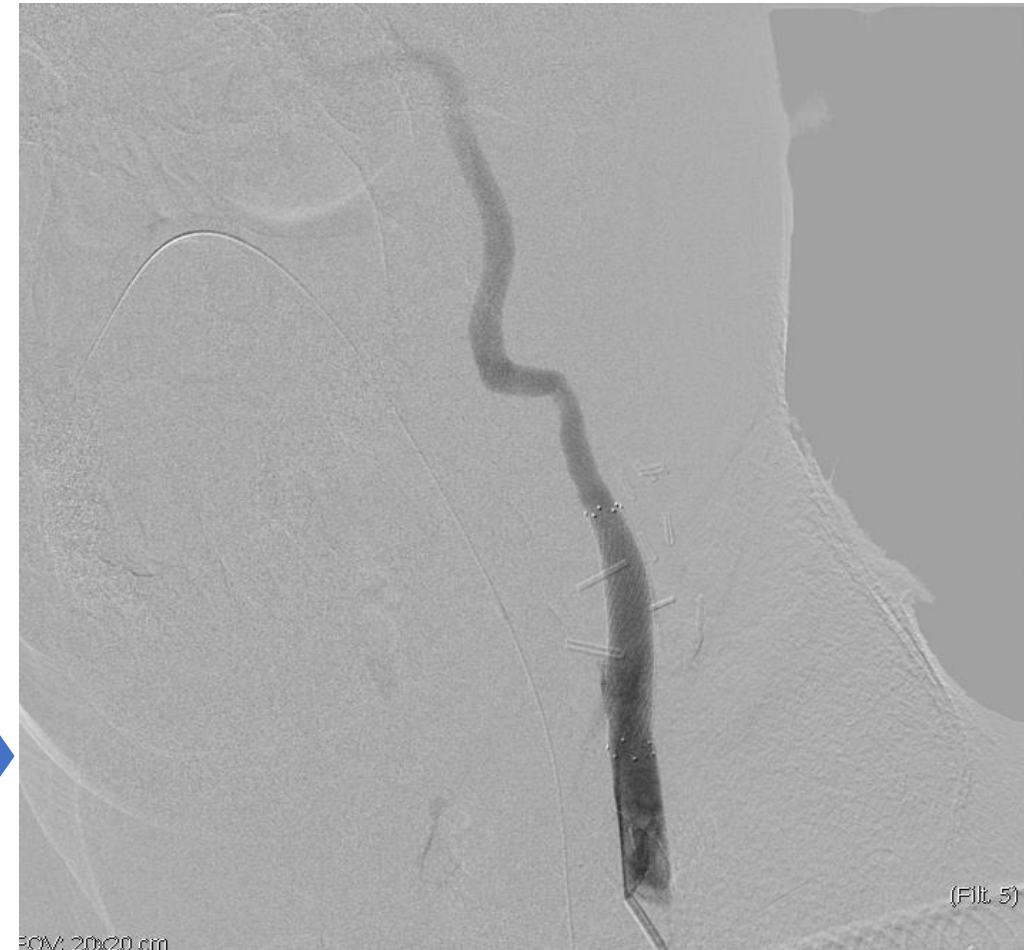
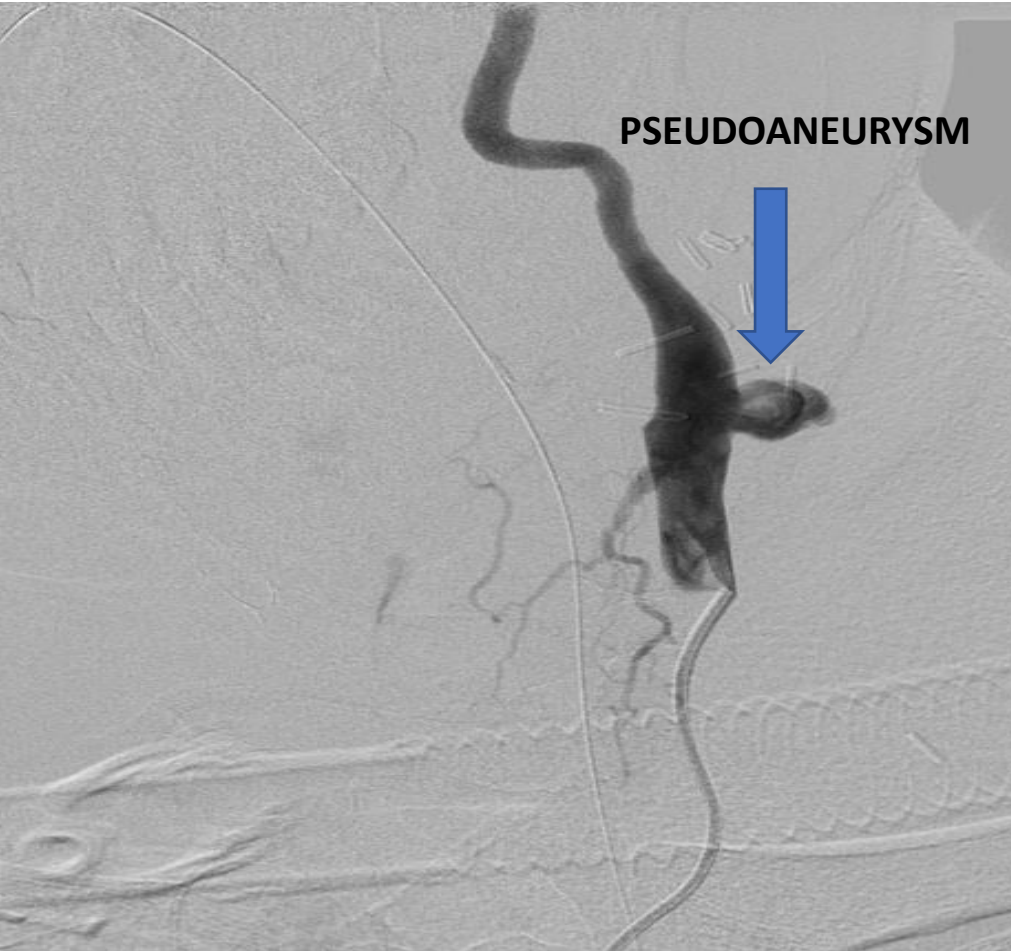


POST



CASE-3

K/C/O Ca tongue S/P surgery with left ECA ligation, Chemo & radiation therapy presented with bouts of bleeding per oral cavity, CT carotid angiogram revealed left common carotid pseudoaneurysm



CONCLUSION

- Carotid Blowout Syndrome emerges as a rare yet critical complication in the context of head and neck cancer
- Endovascular management with covered stent placement or coil embolization are preferred management of choice



References:

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2. Macdonald S, Gan J, McKay AJ, Edwards RD. Endovascular treatment of acute carotid blow-out syndrome. *Journal of Vascular and Interventional Radiology: JVIR*. 2000 Oct 1;11(9):1184-8.
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