

ENT 2019: Endoscope-assisted approach to infra-temporal fossa clearance in head and neck cancer – technique and oncological outcomes - Vidya Bhushan R - St. Johns Medical College

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BACKGROUND: Traditionally, Infratemporal fossa clearance in head and neck cancer surgery necessitates a lip-split/facial incision and Posterior segmental mandibulectomy/mandibulotomy (angle/para-median) approach for adequate exposure. This is because the pterygoid base cut is near-impossible with an intact mandible, and if blindly done, middle cranial fossa may be breached. This approach also has inherent risks of significant morbidity to the patient (unsightly facial scar, infection/exposure of plate at osteotomy site, osteo-radio necrosis, loss of sensation over mentum, facial deformity). Our aim is to describe the utility of transnasal endoscopic assisted approach to infra-temporal fossa clearance in patients with head and neck cancer.

Bladder cancer (BC) is one of the most common cancers, accounting for 3% of all malignant tumours¹. Radical cystectomy (RC) is considered to be the accepted gold standard treatment for patients with localized (T2-T4a) muscle-invasive bladder cancer (MIBC) or recurrent high-risk non-MIBC².

However, it is recognised that RC is associated with side effects such as erectile dysfunction and urinary incontinence, and also with considerable morbidity. Complications related to RC were found to be directly related to age, pre-existing comorbidities, as well as to the surgical procedure, bowel anastomosis, or urinary diversion.

Hence, alternative therapeutic options for high-risk patients, like organ-sparing partial cystectomy (PC) or radiochemotherapy following radical transure-

thral resection of the bladder tumour (TURBT), have gained attention. Accordingly, the EAU (European Association of Urology) guidelines do not provide definitive recommendations, but argue that the decision regarding bladder-sparing or radical cystectomy in elderly patients with invasive bladder cancer should be based on tumour stage and comorbidity.

Over the previous decade, a developing group of writing has recommended PC to speak to a possible option with RC-tantamount oncological outcomes in those cases, related with lower complexity rates, and along these lines advancing further conversation about the standard-of-care choices for those patients. In this manner, choice models for PC are a subject of progressing banter. Appropriate up-and-comers commonly have a singular tumor in a region available for organ-saving medical procedure with nonattendance of carcinoma in situ (CIS). For these patients, and particularly for those with comorbidities, PC speaks to a conceivably less dismal activity that keeps up a flawless bladder with ordinary voiding capacity, abstains from opening of the intestinal tract, and jells sexual capacity.

Nonetheless, information on PC in MIBC patients, particularly with respect to perioperative complexity rates and postoperative wellbeing related personal satisfaction (HR-QoL), is as yet constrained and by and large dependent on little accomplice examines. This work expects to report a solitary place's involvement with terms of oncological results, postoperative HR-QoL, and perioperative horribleness in those

T2 MIBC patients who experienced PC with therapeutic aim. As far as anyone is concerned, this is the principal study revealing Clavien-Dindo characterization for the depiction of right on time and late post-operative inconveniences and HR-QoL information in an open PC arrangement. Also, a remarkable quality of this patient accomplice is that PC was acted in numerous patients that had tumor areas that are ordinarily viewed as contra-showed for PC.

MATERIALS AND METHODS: Patients with head and neck cancer with infratemporal fossa involvement (medial pterygoid/ masseter) with adequate mouth opening (>30mm) were selected for this technique. Patients with restricted mouth opening, involvement of lateral pterygoid/temporalis muscle and pterygoid base were excluded. We perform total endoscopic medial maxillectomy to reach the pterygoid plates and infratemporal fossa. Endoscopically, lower fibres of temporalis and medial pterygoid muscle along with the pterygoid base are cut. The attachment of the medial pterygoid to the mandible is released through the neck incision along with resection of the

masseter. The mucosal cuts are given per orally and the specimen is delivered intoto.

RESULTS: Thirty patients underwent anterior infra-temporal fossa clearance by this approach. 22 patients had squamous cell carcinoma involving the upper gingivo-buccal complex. 6 had squamous cell carcinoma in the maxilla and 2 of them were diagnosed with adenoid cystic carcinoma of maxilla. All eight were clinically staged to be T4b (7th edition AJCC). 10 patient had pT4a disease and 20 patients had pT4b disease. The deep soft tissue margins were negative in all the patients. The mean operating time by this approach was 113 minutes. None of the patients developed epiphora or paraesthesia along the infra-orbital nerve post-operatively.

CONCLUSION: We thus present a novel technique to access infra-temporal fossa which permits significantly expanded exposure, allowing oncologically safe resection of infratemporal fossa by cutting the pterygoid base under direct vision. Avoidance of inherent neurological and cosmetic morbidities are added advantages.

