
(03)

耳鼻喉頭頸部微創手術及器官保留治療的最新進展

Recent Advancements in Minimally Invasive Surgery and Organ Preservation Therapy in ENT and Head & Neck Regions

時間：113 年 6 月 22 日(星期六) 08:35~17:10

地點：臺北榮民總醫院 致德樓第三會議室

08:35-08:45 *Opening Remarks*

朱本元主任
Pen-Yuan Chu
許彥彬主任
Yen-Bin Hsu

座長：藍敏瑛 主任 (Ming-Ying Lan)

08:45-09:10 鼻科門診手術之最新進展
Current Updates on Office-Based Procedures in Rhinology

洪莉婷醫師
Li-Ting Hung

09:10-09:35 經鼻路徑處理眼及眼周邊病灶
Transnasal Approach for Orbital / Peri-orbital Pathologies

黃毓雯醫師
Yu-Wen Huang

09:35-10:00 透過經鼻途徑方式處理鼻腔鼻竇及顱底惡性腫瘤
Transnasal Approach for Sinonasal / Skull Base Malignancies

葉建甫醫師
Chien-Fu Yeh

10:00-10:20 *Coffee Break*

座長：廖文輝 主任 (Wen-Huei Liao)

10:20-10:45 耳咽管功能障礙的挑戰與應對策略
Challenges and Strategies in Managing Eustachian Tube Dysfunction

薛健佑醫師
Chien-Yu Hsueh

10:45-11:15 發展中耳微創手術的個人經驗
Advancements in Minimally Invasive Middle Ear Surgery:
My Personal Experience

杜宗陽主任
Tzong-Yang Tu

座長：方端仁 主任 (Tuan-Jen Fang)

11:15-11:40 門診喉部手術
Office-Based Laryngeal Surgery

許彥彬主任
Yen-Bin Hsu

11:40-12:05 以唾液腺內視鏡手術治療放射性碘引發之慢性唾液腺炎：
臺北榮總治療經驗
Interventional Sialendoscopy for Patients with Radioiodine
Induced Sialadenitis: Experience at Taipei Veterans General
Hospital

張嘉帆醫師
Chia-Fan Chang

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| 12:05-12:30 | <p>甲狀腺結節低侵入性治療的臨床應用：專注於射頻消融和乙醇注射術</p> <p>Clinical Applications of Minimally Invasive Techniques in the Management of Thyroid Nodules: Emphasizing Radiofrequency Ablation and Ethanol Injection</p> | <p>李宗倫醫師 Tsung-Lun Lee</p> |
| 12:30-13:30 | <p><i>Lunch Break</i></p> <p>座長：許彥彬 主任 (Yen-Bin Hsu)</p> | |
| 13:30-14:00 | <p>以前置式輔助性化學治療、手術及風險適應輔助治療進行舌癌的舌保留治療-第二期臨床試驗</p> <p>Tongue Conservation Treatment by Neoadjuvant Chemotherapy Followed by Surgery and Risk-Adapted Adjuvant Therapy for Oral Tongue Squamous Cell Carcinoma: A Phase II Clinical Trial</p> | <p>戴世光主任 Shyh-Kuan Tai</p> |
| 14:00-14:30 | <p>口咽部鱗狀上皮癌無放射線的個人化治療：現實或想像？</p> <p>Customizing an Irradiation-Free Therapy for Squamous Cell Carcinoma of Oropharynx: Feasibility or Fiction</p> | <p>林曜祥院長 Yaoh-shiang Lin</p> |
| 14:30-15:00 | <p>前導式化療後施行經口雷射顯微手術應用於咽喉癌之治療：從 TPF 到 DCU 處方</p> <p>Neoadjuvant Chemotherapy Followed by Transoral Laser Microsurgery for Laryngopharyngeal Cancers: Changing NACT Regimen from TPF to DCU</p> | <p>朱本元主任 Pen-Yuan Chu</p> |
| 15:00-15:30 | <p><i>Coffee Break</i></p> <p>座長：朱本元 主任 (Pen-Yuan Chu)</p> | |
| 15:30-16:00 | <p>經口機器人手術應用於喉癌及下咽癌</p> <p>Transoral Robotic Surgery for Laryngeal and Hypopharyngeal Cancer</p> | <p>王仲祺主任 Chen-Chi Wang</p> |
| 16:00-16:30 | <p>免疫治療在非轉移頭頸癌的角色</p> <p>The Role of Immunotherapy in Non-Metastatic Head and Neck Cancer</p> | <p>楊慕華主任 Muh-Hwa Yang</p> |
| 16:30-17:00 | <p>碳離子放療應用於頭頸癌：臺北榮總初步經驗</p> <p>Carbon Ion Radiotherapy for Head and Neck Cancer: Initial Experience of Taipei Veterans General Hospital</p> | <p>王令瑋主任 Ling-Wei Wang</p> |
| 17:00-17:10 | <p><i>Closing Remarks</i></p> | <p>戴世光主任 Shyh-Kuan Tai</p> |

Current updates on office-based procedures in rhinology

鼻科門診手術之最新進展

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With advances in endoscopic instrumentation and technology, recent years have significant expansion in office-based rhinology. The progression of the specialized equipment and novel therapies specifically designed for use in the clinical setting has enabled an increasing number of rhinologic procedures to be effectively performed in the office without the need for general anesthesia. Less-invasive therapeutic options for the management of a broad range of sinonasal pathologies can be performed. Many sinonasal conditions can now be safely and successfully treated in the clinic. Potential advantages in comparison with surgery, such as faster scheduling, shorter procedure duration, quicker patient recovery, and reduced anesthetic morbidity has been noted. These advantages can be related to better satisfaction, less cost, and time saving for both the patient and surgeon. In this review, office-based procedures such as inferior turbinate reduction, balloon-assisted ostium dilation, and cryotherapy would be discussed.

Transnasal approach for orbital / peri-oribtal pathologies

經鼻路徑處理眼及眼周邊病灶

Yu-Wen Huang

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The intricate anatomy and close proximity of the nasal and orbital cavities present unique challenges and opportunities for rhinologists in the management of orbital and peri-orbital pathologies. The transnasal approach represents a paradigm shift in the surgical management of orbital and peri-orbital pathologies, offering minimally invasive access to these delicate regions through the natural corridors of the nasal cavity. By harnessing endoscopic techniques and advancements in imaging technology, rhinologists can navigate complex anatomy with precision and achieve optimal outcomes while minimizing morbidity.

Key considerations in the transnasal approach include patient selection, preoperative assessment, and surgical technique. Understanding the nuances of orbital anatomy and pathology is paramount, as it informs decision-making and facilitates tailored surgical interventions. Collaboration with ophthalmologists and neurosurgeons further enhances the multidisciplinary approach to patient care, ensuring comprehensive evaluation and management.

This talk will explore the expanding repertoire of transnasal procedures for a diverse range of orbital and peri-orbital pathologies, including orbital tumors, vascular lesions, and inflammatory conditions. Case illustrations will highlight the efficacy and safety of the transnasal approach in achieving complete resection and optimizing functional and cosmetic outcomes.

In conclusion, the transnasal approach heralds a new era in ophthalmic surgery, empowering rhinologists to address complex orbital and peri-orbital pathologies with greater efficacy and reduced morbidity. Through ongoing innovation and collaboration, we can continue to advance patient care and improve outcomes in this challenging yet rewarding field.

Transnasal approach for sinonasal / skull base malignancies

透過經鼻途徑方式處理鼻腔鼻竇及顱底惡性腫瘤

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Sinonasal and skull base malignancies pose a complex and demanding array of tumors with distinctive anatomical considerations and clinical features. Originating from diverse tissues within the sinonasal and skull base regions, such as the nasal cavity, paranasal sinuses, and neighboring structures like the orbit and intracranial compartment, these malignancies present unique challenges. Treatment typically involves a multidisciplinary approach integrating surgery, radiation therapy, and chemotherapy, tailored to the specific tumor type, location, and disease extent. Recent advancements in surgical methods, and supplementary therapies have contributed to enhanced outcomes in patients with these malignancies. Nonetheless, achieving optimal results hinges on precise diagnosis, thorough surgical planning, and comprehensive postoperative management.

The transnasal approach has emerged as a valuable method for treating sinonasal and skull base malignancies. This technique presents various benefits, such as providing direct access to tumors situated in intricate anatomical areas while reducing damage to nearby tissues. This section explores the fundamental principles, surgical methods, and results linked with employing the transnasal approach to manage these malignancies. Moreover, it underscores the significance of interdisciplinary cooperation in enhancing patient outcomes and reducing postoperative complications. In summary, the transnasal approach shows promise as a comprehensive treatment strategy for sinonasal and skull base malignancies, offering enhanced surgical accessibility and potentially improved patient results.

Challenges and strategies in managing Eustachian tube dysfunction

耳咽管功能障礙的挑戰與應對策略

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The Eustachian tube serves as a conduit between the middle ear and nasal cavity, approximately 3 to 4 centimeters long, composed of bone, cartilage, and soft tissues. Its primary functions include regulating middle ear pressure, clearing secretions, preventing bacterial migration, and shielding the inner ear from noise. Dysfunction can lead to symptoms like ear fullness, pain, tinnitus, and echoing voices. Types of dysfunction include obstructive, baro-challenge-induced dysfunction, and patulous. Diagnosis involves medical history, endoscopy, and hearing tests. Treatments vary by cause. For obstructive dysfunction, medication or balloon eustachian tuboplasty may be effective. Patulous dysfunction, less responsive to medication, might require middle ear ventilation tube placement or surgical valve implantation to promote closure. Accurate diagnosis is crucial for effective treatment.

Advancements in minimally invasive middle ear surgery: My personal experience

發展中耳微創手術的個人經驗

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In the late 1990s, I initiated my personal transcanal tympanoplasty technique that involved direct access through the drum perforation under a microscope. This technique reached maturation in the mid-2000s and was subsequently introduced to the otologic community and the public. Surgical results are shown to illustrate the efficacy of this method in treating lesions efficiently while preserving normal tissue structure and function.

Endoscopic middle ear surgery gained prominence worldwide in the early 2010s, with several renowned otologists advocating its adoption. The author incorporates endoscopic components not only in otitis media but also in cholesteatoma and otosclerosis operations. A comprehensive approach, utilizing both endoscope and microscope, is emphasized for its versatility and potential advantages.

I introduced a novel approach by combining the endoscope and microscope in middle ear surgery. While acknowledging the prevalent use of endoscopes at 0, 30, and 45-degree angles, the author prefers a more versatile utilization. This approach has proven beneficial, particularly in advanced ear surgery such as successful repair of skull base defects with cartilage and reducing complication and recurrence rates.

The combination of endoscope and microscope, termed bi-scopic surgery, has become the author's routine practice, even in challenging cases such as cholesteatoma with skull base invasion, congenital cholesteatoma, and otosclerosis operations. The report emphasizes the efficiency of this approach, resulting in shorter operation times, improved hearing outcomes, and lower recurrence rates.

The author recommends the use of a 70-degree endoscope, rarely mentioned by other otologists. The large angle of this endoscope facilitates clear identification and removal of cholesteatoma matrix, especially in advanced cases, further contributing to the success of the surgical intervention.

The integration of transcanal tympanoplasty and endoscopic components in middle ear surgery represents a significant advancement in otologic practice. The author's versatile approach, combining both endoscope and microscope, offers a comprehensive solution with potential benefits in various otologic procedures. This report encourages further exploration and adoption of these techniques within the otologic community.

Office-based laryngeal surgery

門診喉部手術

Yen-Bin Hsu

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Benign laryngeal lesions are common in laryngology clinic. Traditionally, many of these lesions are treated surgically, mainly in the operating room under general anesthesia. However, this procedure requires complex instruments and carries the risk and costs associated with general anesthesia. Additionally, patients with C-spine disease and trismus are not ideal candidates for this surgical procedure.

With the advancement of endoscopes in ENT field, laryngologists can obtain a better view of the vocal folds. Office-based laryngeal surgery has become increasingly popular over the past two decades. In our hospital, transoral laryngeal surgery under flexible laryngoscopic guidance has been carried out since 1993. Initially, we conducted transoral injection laryngoplasty for patients with unilateral vocal fold paralysis. With increasing experience, we expanded our procedures to include biopsies of laryngeal or pharyngeal lesions, removal of foreign bodies, and phonosurgery for vocal fold polyps, all performed transorally. Since 2007, we have also been performing corticosteroid injections for the treatment of benign laryngeal lesions, such as vocal fold polyps, nodules, cysts, and vocal process granulomas, using a percutaneous approach via the cricothyroid or thyrohyoid membranes.

Currently, office-based laryngeal surgery has become an important treatment modality in the field laryngology. It has spared many traditional surgeries, allowing patients to save valuable time and expenses associated with hospital admission and general anesthesia. In this section, we will share our experiences in performing office-based laryngeal surgery, including patient outcomes, and discuss its benefits and limitations.

Interventional sialendoscopy for patients with radioiodine induced sialadenitis: Experience at Taipei Veterans General Hospital

以唾液腺內視鏡手術治療放射性碘引發之慢性唾液腺炎：臺北榮總治療經驗

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Background: Radioiodine therapy has been proven to be an effective treatment for patients with differentiated thyroid cancers following total thyroidectomy. However, a known consequence of this therapy is radioiodine-induced sialadenitis (RAIS), which significantly distresses patients. Interventional sialendoscopy, a minimally invasive surgical procedure, has been introduced for the management of RAIS. The aim of this study is to analyze the treatment result at our hospital and compare them with previous literature reports.

Methods: Patients with RAIS who underwent interventional sialendoscopy between January 2014 and January 2022 at Taipei Veterans General Hospital were recruited. Demographic and clinical data were collected, including age, gender, symptoms, dosage of radioiodine therapy, gland involvement, surgical indications, intraoperative findings, procedures, complications, and patient satisfaction.

Results: Thirteen patients with RAIS were analyzed. Ten patients were female, and three were male. The mean age was 49.16 years (range, 37.95-77.79 years). Six patients underwent more than one surgical procedure. Symptoms were more commonly related to the parotid gland (92.31%) than the submandibular gland (7.69%). Both sides of the glands were affected in six patients (46.15%). Stenosis was the most common intraoperative finding. At the last postoperative follow-up, nine patients (69.23%) still experienced varying degrees of salivary gland symptoms, but reported feeling better than before surgery.

Conclusion: Interventional sialendoscopy could serve as an effective tool for managing patients with RAIS who do not respond to conservative treatment.

Clinical applications of minimally invasive techniques in the management of thyroid nodules: Emphasizing radiofrequency ablation and ethanol injection

甲狀腺結節低侵入性治療的臨床應用：專注於射頻消融和乙醇注射術

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Thyroid nodules are a common clinical finding, with an estimated prevalence of 50% in the general population. While the majority of thyroid nodules are benign and asymptomatic, a subset may require intervention due to symptoms or suspicion of malignancy. Conservative management of thyroid nodules has gained significant attention in recent years, reflecting a shift towards non-invasive interventions to address the common clinical entity. This approach is particularly valuable in cases where surgical intervention may pose a higher risk to the patient or when individuals prefer non-surgical treatments due to various reasons such as cosmetic concerns or underlying health conditions that make surgery less favorable. Two prominent modalities within non-invasive treatment are radiofrequency ablation (RFA) and ethanol injection (EI), both offering minimally invasive options with promising outcomes.

RFA has garnered interest for its efficacy in reducing the size of thyroid nodules and alleviating associated symptoms. The use of thermal energy to target and shrink nodules has not only shown promising outcomes in clinical studies but has also provided a minimally invasive option for patients who may not be suitable candidates for surgery. Moreover, the ability of RFA to improve patient-reported outcomes adds to its appeal as a valuable tool in the management of symptomatic thyroid nodules.

Similarly, EI has emerged as a viable approach, particularly for thyroid nodules with cystic components. By inducing necrosis and subsequent volume reduction through direct injection of ethanol, this technique offers a safe and effective alternative to surgery. The ability of EI to not only reduce nodule size but also alleviate symptoms and improve cosmetic outcomes further enhances its significance in the conservative treatment of thyroid nodules.

As research continues to validate the efficacy and safety of these non-surgical interventions, it is evident that RFA and EI are likely to play an increasingly vital role in comprehensive patient care. The ability to tailor treatment options according to individual patient needs and preferences while ensuring effective management of thyroid nodules underscores the importance of these minimally invasive techniques in the modern healthcare landscape.

Tongue conservation treatment by neoadjuvant chemotherapy followed by surgery and risk-adapted adjuvant therapy for oral tongue squamous cell carcinoma: A phase II clinical trial

以前置式輔助性化學治療、手術及風險適應輔助治療進行舌癌的舌保留治療：第二期臨床試驗

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Background: To assess the feasibility of tongue conservation treatment with induction chemotherapy (ICT), tongue conservation surgery, and risk-adapted postoperative adjuvant therapy in oral tongue squamous cell carcinoma (OTSCC).

Methods: Patients with newly diagnosed OTSCC cT2-4 N0-2 M0 were recruited. The ICT with a regimen of docetaxel, cisplatin, and oral tegafur/uracil (DCU) was administrated every 21 days. After the first cycle of ICT (DCU1), patients with a more than 30% decrease in the longest diameter of primary tumor underwent a second cycle of ICT (DCU2). Tongue conservation surgery was performed after ICT, and risk-adapted adjuvant therapy was organized based on pathological features.

Results: From July 2011 to December 2015, a total of 23 patients were enrolled, 87% of whom were classified as stage III–IV. Clinical responders to DCU1 and DCU2 were determined in 90.5% (19/21) and 88.2% (15/17) of patients. Tongue conservation surgery was performed in 16 responders to ICT. Only one patient had a positive margin (6.3%), and a complete pathologic response was achieved in eight patients (50%). Only one patient developed local recurrence after a median follow-up of 58.6 months (range, 7.9–105.2). The 5-year overall survival (0% vs. 87.5%, $p = 0.001$) and disease-specific survival (0% vs. 93.3%, $p = 0.000$) were significantly different between the DCU1 non-responders and responders.

Conclusion: Tongue conservation treatment with ICT, followed by conservation surgery and risk-adapted adjuvant therapy, is feasible for patients with OTSCC who are good responders to ICT. However, the outcomes of non-responders are dismal. Further study in a larger patient population is warranted.

Customizing an irradiation-free therapy for squamous cell carcinoma of oropharynx: Feasibility or fiction

口咽部鱗狀上皮癌無放射線的個人化治療：現實或想像？

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In recent years, the incidence of oropharyngeal cancer caused by human papillomavirus (HPV) infection has risen sharply in European and American countries. These account for about 70% of the annual oropharyngeal cancer cases. Taiwan has also witnessed a gradual increase of HPV-related oropharyngeal cancer incidence, but these account for only about one-quarter of the annual oropharyngeal cancer cases. The remaining three-quarters of cases were still attributed to smoking, alcohol, and betel nut use.

Traditionally, the majority of oropharyngeal cancer patients received concurrent radiotherapy and chemotherapy. This achieved relatively good treatment outcomes, but lead to considerable long-term sequelae in the survivors' lives. HPV-related oropharyngeal cancer tends to respond better to radiotherapy and chemotherapy. Therefore, various de-escalation therapies were explored worldwide to reduce treatment sequelae and improve the quality of life of these patients.

However, the majority of oropharyngeal cancer cases in Taiwan are caused by smoking, alcohol, and betel nut use. This report will share the experience of our hospital in recent years in implementing de-escalation therapy for oropharyngeal cancer cases (mainly tonsillar cancer and base of tongue cancer).

Neoadjuvant chemotherapy followed by transoral laser microsurgery for laryngopharyngeal cancers: Changing NACT regimen from TPF to DCU

前導式化療後施行經口雷射顯微手術應用於咽喉癌之治療：從 TPF 到 DCU 處方

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Traditionally, total laryngectomy has been the standard treatment approach for advanced laryngeal and hypopharyngeal cancers. However, this method results in the loss of the larynx, leading to a deterioration in the quality of life for patients. Over the past two decades, a combination of chemotherapy and radiotherapy (CRT) has become more popular, but high severe late toxicities have been reported, including laryngeal and pharyngeal dysfunction.

Transoral laser microsurgery (TLM) has emerged as an alternative organ-preserving treatment method for several decades. Initially applied primarily to early-stage cancers, with the introduction of the concept of neoadjuvant chemotherapy (NACT), TLM is now being utilized for advanced-stage laryngeal and hypopharyngeal cancers. The main purpose of using NACT is to induce tumor shrinkage, followed by TLM to excise the tumor with margins adjusted according to the extent of the shrunken tumor. This approach may reduce the need for postoperative radiotherapy (RT) or decrease the RT dosage if necessary, potentially enhancing the quality of life after treatment.

Since 2016, two cycles of NACT with the docetaxel, cisplatin, and 5-fluorouracil (TPF) regimen or cisplatin and 5-fluorouracil (PF) regimen have been administered for bulky laryngeal and pharyngeal tumors. The clinical response rate of primary tumors can achieve up to 89% (16/18), including a 33% complete response and a 56% partial response rate. However, patients receiving NACT with TPF or PF regimens require hospitalization for at least 5 days. Furthermore, 66% of the patients experienced severe neutropenia (grade 3 and 4).

In recent years, the NACT regimen has shifted from the TPF regimen to the DCU regimen (docetaxel, cisplatin, and Ufur) for two cycles. The advantages of the DCU regimen include outpatient department (OPD) treatment, no need for port-A insertion, comparable tumor response (95%), and a lower rate of severe neutropenia (18%). Most of the tumors can be excised with en bloc resection under TLM after NACT.

This presentation will share our experiences with NACT followed by TLM for laryngeal and pharyngeal cancers.

Transoral robotic surgery for laryngeal and hypopharyngeal cancer

經口機器人手術應用於喉癌及下咽癌

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After the da Vinci robotic surgical system gained widespread adoption among cardiothoracic and urologic surgeons for assisting in endoscopic procedures, its application has expanded to include the treatment of head and neck diseases. This robotic-assisted technique offers several distinctive features, such as a 3-D high-magnification endoscope and endo-wristed instruments equipped with motion scaling and tremor reduction functions. These advancements enable surgeons to execute endoscopic surgeries with enhanced precision, dexterity, and control.

In the ENT field, one of the rapidly emerging robotic surgical procedures is transoral robotic surgery (TORS), particularly for treating upper airway diseases such as early-stage pharyngeal and laryngeal cancers. Common surgical indications include oropharyngeal tumors affecting the palatine tonsil, tongue base, and supraglottis. However, we have expanded the application of TORS to include the management of hypopharyngeal cancer, glottic carcinoma with anterior commissure involvement, and even total laryngectomy.

Based on our published papers and prospective studies, TORS has demonstrated the potential to provide patients with favorable survival rates, local control rates, and organ preservation rates, along with satisfactory outcomes in swallowing and phonation. Moreover, TORS has shown promise in reducing surgical morbidities, allowing a significant portion of our patients to either avoid radiation therapy altogether or receive reduced dosages. In this presentation, I will share my experiences with TORS by presenting relevant data. I will discuss the advantages of TORS and delve into its implications. However, the da Vinci robot comes with a high price tag, and consequently, the cost of TORS remains high in Taiwan, with the procedure not covered by the National Health Insurance system. To further advance head and neck robotic surgery, ongoing collaboration, and communication among experts from around the globe are essential.

The role of immunotherapy in non-metastatic head and neck cancer

免疫治療在非轉移頭頸癌的角色

Muh-Hwa Yang

楊慕華

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臺北榮民總醫院 腫瘤醫學部

Immune checkpoint inhibitors (ICI) have brought about a paradigm shift in the treatment landscape of recurrent/metastatic head and neck squamous cell carcinoma (R/M HNSCC). ICI monotherapy or in combination with chemotherapy is now considered the standard of care for first-line treatment of R/M HNSCC, while ICI monotherapy has also gained approval as the standard treatment for platinum-refractory R/M HNSCC. However, the role of ICI in locally advanced HNSCC has been explored to a limited extent. Pivotal clinical trials have failed to demonstrate the efficacy of ICI in combination with definitive concurrent chemoradiotherapy (CCRT), with potential explanations including the lymphatic system damage caused by definitive CCRT, which may dampen the antitumor immune response. In addition to chemo-immunotherapy, extensive clinical trials are underway to investigate the role of ICI as neoadjuvant treatment before definitive therapy. Additionally, there is accumulating evidence from studies examining the role of ICI as adjuvant therapy following post-operative CCRT. In summary, ICI has heralded a paradigm shift in the treatment of HNSCC, with its role in R/M HNSCC now well established. Further translational studies are needed to elucidate the underlying mechanisms responsible for the ineffectiveness of the ICI-CCRT combination, as well as clinical trials aimed at elucidating the role of ICI in earlier stages of HNSCC, such as neoadjuvant or adjuvant treatment.

Carbon ion radiotherapy for head and neck cancer: Initial experience of Taipei Veterans General Hospital

碳離子放療應用於頭頸癌：臺北榮總初步經驗

Ling-Wei Wang, Yu Mei Kang, Yu Wen Hu

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Surgery and radiotherapy (RT) are both important modalities for head and neck squamous cell carcinoma (HNSCC). Intensity modulation radiotherapy with photon is the standard of care for HNSCC. However, for pathology other than SCC in the head and neck region, the results of photon RT are often unsatisfactory. Particle therapy, esp. carbon ion radiotherapy (CIRT), may be one of the choices for uncommon pathology in the H & N region. We started a clinical trial with CIRT at Taipei Veterans General Hospital since 2022 and started regular treatment since May 2023.

From our CIRT databank, we found 6 salivary gland tumors (2 major and 4 minor), one ameloblastoma and one SCC of maxillary sinus. Among them 4 were males. Acute toxicities were all mild (grade 1-2). Most tumors had response (including 4 CR) to CIRT with our limited follow-up time. For late toxicity, one patient had carotid blowout syndrome. One patient had soft tissue necrosis. The case with maxillary sinus cancer had recurrence 5 months after CIRT. All patients survived up to this presentation.

Our initial experience demonstrates that CIRT is an effective modality of Rx for head and neck cancer other than HNSCC with mild acute toxicities. However, few patients still had grade 3 late toxicity. Enrollment of more patients and longer follow up are needed