Intracranial Abscess Secondary to Chronic Sinusitis – A Case Report

Abe J¹, Taguchi T¹, Fukushima K¹, Takeuchi H¹, Kitano H¹
Kanbe A², Kurosaki M², Watanabe T²
1) Division of Otolaryngology, Head and Neck Surgery, Department of Medicine of Sensory and Motor Organs, School of Medicine, Tottori University Faculty of Medicine.
2) Division of Neurosurgery, Department of Brain and Neurosciences, School of Medicine, Tottori University Faculty of Medicine.

Introduction: Brain abscess is known as a severe complication of sinusitis. Intracranial complication is on a declining trend through the development of antibiotics. However, the mortality of intracranial complication with sinusitis is not a low rate and once it happens, it follows serious course. Therefore, sinusitis should be treated carefully and otolaryngologists or any physician should maintain a keen awareness and thoroughly investigate any possible signs of intracranial spread.

Case report: A 51-year-old male visited the emergency department with impaired consciousness and seizure. Computed tomography (CT) identified a mass in the left frontal lobe and pan-sinusitis bilaterally. From the clinical findings, the case was diagnosed as a brain abscess associated with chronic sinusitis. In first, he was treated with intravenous ceftriaxone for 2 months to obtain the capsule around the abscess. And then endoscopic sinus surgery and extranasal frontal sinusectomy were performed. Then craniotomy was performed and a mass located in the left frontal lobe was excised by neurosurgeons. The operations were successively performed without severe complications. No bacterium was cultured from the pus of the excised brain abscess. The patient had been making satisfactory progress. No recurrence or neurologic deficits have been noted so far.

Conclusion: We report a case of a brain abscess in the course of chronic sinusitis. The mortality of intracranial complication with sinusitis is not a low rate. If the intracranial extension of sinusitis or brain abscess associated with sinusitis were suspected, early diagnosis and treatment in cooperation with other department, especially with neurosurgeons are important.
A Case Report of Ductal Cysts of the Parotid Gland with α-amylase Crystalloids

Kana Fujii, Naritomo Miyake, Katsuyuki Kawamoto, Hiroya Kitano
Department of Otolaryngology, Head and Neck Surgery Faculty of Medicine, Tottori University

Background: Alpha-amylase crystalloids are eosinophilic materials of various shapes found in the parotid gland and were first reported as ‘crystalloids in salivary duct cysts of the human protid gland’. The α-amylase crystalloids rarely induce a foreign body reaction called ‘crystalloid granuloma’, and to a few case reports have been published. We herein report a case of ductal cysts of the parotid gland with α-amylase crystalloids.

Case report: A 83-year-old Japanese woman complained a tender mass in the right parotid gland. MRI of the head and neck showed well-delineated soft tissue intensity masses of with cystic lesion in the right parotid gland and the largest one is 25mm diameter. Thick pus was aspirated by a puncture and the aspiration biopsy cytology showed a number of eosinophilic α-amylase crystalloids with multinucleated histiocytes and neutrophils. Therefore the crystalloid granuloma was suspected. Under a clinical diagnosis of benign parotid gland tumor, the right parotidectomy was performed. The right parotid was scarred probably with inflammation. No facial palsy and other complications were presented after operation. Pathologically, the removed tumor was cystic lesion lined by stratified squamous epithelium and most likely derived from a duct. At the inner walls of the ductal cysts, infiltration by a number of lymphocytes, plasma cells and macrophages with fibrotic reaction were seen. Scattered α-amylase crystalloids were observed in the ducts and it was diagnosed as ‘ductal cysts of the parotid gland with α-amylase crystalloids’.

Discussion: Crystalloid was divided into 4 subtypes; α-Amylasecrystalloid, collagenouscrystalloid, tyrosine-rich crystalloid and intraluminalcrystalloid. Tyrosine-rich crystalloids and intraluminal crystalloids are often detected in malignant parotid tumors. α-Amylase crystalloids are detected in mostly benign lesion of the parotid gland like a crystalloid granuloma, sialadenitis or cystic lesion.

Conclusion: In this case, aspiration biopsy cytology showed α-amylase crystalloids that suggested benign tumor. Even when the cytology shows α-amylase crystalloids, we guess that the first choice for treatment course of the parotid tumor is parotidectomy using an intraoperative rapid diagnosis to determine the tissue type and the most important thing is to prepare for malignancy.
Case Report: Fibrolipoma of Eustachian Tube Resected with Endoscopy and Polypectomy Snare -

Taihei Fujii, Naritomo Miyake, Kaoru Takeuchi, Rie Morizane, Kensaku Hasegawa, Hiromi Takeuchi, Hiroya Kitano
Department of Otolaryngology, Head and Neck Surgery Faculty of Medicine, Tottori University

**Introduction:** Fibrolipoma is a lipoma having an abundant amount of fibrous tissue. Lipomas are the commonest benign neoplasm, but they have been considered very unusual growths in the eustachian tube. Fibrolipoma is one of the rare variant of the lipoma and no case has been reported in the eustachian tube. This article describes a case of 29-year old female with fibrolipoma of the eustachian tube. Diagnosis was suspected with the help of endoscopy and MRI. The resection of the tumor was performed both with rigid endoscope and flexible fiberscopy using a snare for endoscopic polypectomy.

**Case report:** A 29 year old female patient reported to the outpatient department of Tottori university hospital, Japan with recurrent otitis media with effusion on right ear in August 2006. A tympanostomy tube had been indwelled but otorrhea remained for several years. Pure tone audiometry indicated air-bone gap but no abnormal appearance was seen on fiberscopy and temporal bone CT.

In April 2010, she complained nasal obstruction and follow-up endoscopy revealed the tumor appearing from right pharyngeal opening of eustachian tube. The tumor in the right eustachian tube on MRI was 27mm*10mm size, well enhanced with gadolinium contrast agent, presented as low intensity with fat suppression, apparently-circumscribed and no invasive sign was seen. These evidences made suspicion for lipomas most likely.

We biopsied it with fiberscopy at the outpatient office but could not make a definitive diagnosis. Then we biopsied it with endoscopy in operation room and the microscopic findings revealed adipose tissue having an abundant amount of fibrous tissue. Pathologic diagnosis was fibrolipoma.

Under general anesthesia, submucous resection of nasal septum and endoscopic eustachian tube tumor resection were performed. From right nose, one operator inserted rigid endoscope and a forceps to hold and tract the tumor. From left, the other one inserted fiberscope. The left side operator manipulated polypectomy snare through the fiberscope, hanged the base of the tumor with the snare, and resected the tumor as possible with electrocautery. We made sure of that there was no obstruction of eustachian when the operation was completed.

After the operation, otorrhea and otitis media were cured. The base of the tumor of eustachian tube remains but have not glowed bigger.

**Discussion:** Fibrolipoma is one of the rare variant of the lipoma and this is the first report of fibrolipoma in the Eustachian tube. The treatment of lipomas including fibrolipoma is usually surgical excision with rare recurrence. Resection was required in this case because the tumor caused recurrent otitis media with effusion. We selected endoscopic surgery with polypectomy snare as minimally invasive surgical procedure and got a gratifying result.

**Conclusion:** We report fibrolipoma of Eustachian tube resected with endoscopy and polypectomy snare. In our experience, endoscopic polypectomy is useful for the treatment of eustachian tube tumor.
Subglottic Laryngeal Closure. -A Unique Modified Procedure of Laryngotracheal Separation Preventing Aspiration-

Naritomo Miyake, Katsuyuki Kawamoto, Kazunori Fujiwara, Yuji Hasegawa, Hiroya Kitano
Department of Otolaryngology, Head and Neck Surgery Faculty of Medicine, Tottori University

Introduction: Chronic pulmonary aspiration is frequently observed in patients with severe neurologic disorders and in subjects with an altered anatomy of the upper aerodigestive tract because of the presence of a tumor or resection. Effective control of severe chronic aspiration (clinically intractable) is only achieved by complete separation of the digestive and respiratory tracts. So far, laryngotracheal separation (LTS) is one of the ideal surgical procedures for intractable aspiration. One disadvantage of this procedure is that the oral side of the tracheal stump can break down. The incidence of fistula formation is relatively high (17 to 38 percent). To address this problem, we decided to develop LTS. We performed subglottic laryngeal closure (SGLC) as a new and safe surgical technique and evaluated its procedure and treatments.

SGLC is an operation to prevent aspiration by separating the upper airway from the digestive tract at subglottic level. After thyroid cartilage and cricoid caltilage are removed, larynx is transected at the level of subglottis and then the stump is sutured and covered with cricoarytenoidal muscles and strap muscles. Distal trachea is sutured to the skin as in total laryngectomy. In LTS, thin tracheal mucosa is sutured at upper trachea level. But in this procedure, fat subglottic mucosa is sutured at subglottic level.

Subjects and Methods: The study consisted of a retrospective analysis of the hospital records of patients submitted to subglottic laryngeal closure between 2007 and 2011 obtained from Tottori University Hospital, Japan. 32 Patients (24 Males and 8 females) ranging in age from 23 to 91 Years were submitted to Subglottic laryngeal closure. SGLC was performed under local anesthesia in 21 patients (66%) and under general anesthesia in 11 patients (34%). The following clinical data concerning the surgical procedures were examined: operative data (operative time, intra-operative bleeding, time until drain removal), outcome (aspiration, changes in nutrition status), and complications. The occurrence of a subcutaneous fistula of the proximal laryngeal stump was evaluated by VF. All patients were operated on by the same surgical team.

Results: All 32 patients underwent SGLC in safe. Fistulation was observed in only one case (1/32, 3.1%). The patient was after concurrent chemoradio therapy (CCRT) for opharyngeal cancer and was our first case of SGLC. We consider his neck tissue damaged much with CCRT and referred to decide to close subcutaneous fistula with local flap. Small bleeding after operation was observed in one case (1/32, 3.1%) taking warfarin and antiplatelet drugs. Ultimately, the procedure relieved aspiration pneumonia in all our patients. Subglottic closure was effective in 32(100%) patients.

Conclusion: SGLC is effective in the treatment and prevention of pulmonary aspiration. The incidence of postoperative complications is very low, especially about subcutaneous fistula. We thus conclude that this procedure is likely to be useful as a simple and safe alternative even in patients with poor conditions. A procedure effective in eliminating intractable aspiration can prevent not only pneumonia but also declines in quality of life.
Multiple Aphthous Stomatitis

Tomohiro Kamiura
Kyorin University Hospital

Aphthous stomatitis is a common illness for otolaryngologists in daily practice. Most cases of aphthous stomatitis can be treated by gargling or regional application of steroids, but in some cases treatment is not effective and diagnosis may be difficult. Difficulty in diagnosis is caused by constantly changing condition of oral mucosa, habitually receiving mechanical, chemical and thermal stimulus through food and mastication. In some cases, oral mucosa lesion appears as local symptom of systematic disease. Here we report the case in which diagnosis and treatment was difficult.

The patient was 27 years old male. He had a past history of depression, and had been taking paroxetine and zolpidem. He visited a local otolaryngological clinic on March 7th with complaint of fever and sore throat for the past few days. He was diagnosed with acute pharyngitis, and was prescribed cefditoren pivoxil. His symptoms resolved in a few days. In mid-April, he re-visited the clinic for sore throat, and was prescribed prulifloxacin. His symptom did not respond to the medication. Then, superficial white exudates had appeared on his tongue. The lesion and fever had been getting worse. He was prescribed Florid gel miconazole on April 25th, but his symptoms did not improve. On April 27th he was referred to our department. Upon arrival to our hospital, he could not even drink water, and was hospitalized.

Initial examination showed superficial white exudates and ulceration on the inflamed mucosa of the mouth and tongue. The exudates could not be wiped off. His white blood cell count was 12100 /μL with high ratios of neutrophil (71.9%) and monocyte (13.1%). He was given Florid gel and aciclovir for four days for possible fungus or herpes infection, but neither subjective nor objective symptoms did not improve. Then, he was given prednisolone in tapering dose from 40 mg (Total of 300 mg in 8 day), but it was not effective. lidocaine and narcotic analgesic were ineffective to mouth sore.

During the follow up, examinations on autoantibody (anti-desmoglein 1, anti-desmoglein 3, anti-BP(bullous pemphigoid antibody), tumor marker (CEA, CA19-9), lesion site biopsy, ASK, ASO, microbiological culture (fungus, acid fast bacilli, pharyngeal chlamydia, gonococcal bacteria), HIV infection (CD3, CD19, CD/CD8 ratio) was conducted for possible connective tissue disorder, tumor, and specific infection, but all test results were negative.

After 11th day of hospitalization, white exudates had disappeared from the mucosa. However, glossalgia and tongue ulceration did not improve, and oral intake continued to be difficult. Serum albumin level had decreased to 3.1 g/dl from 4.8 at the first visit.

Since medications did not improve subjective symptoms, silver nitrate was applied to tongue ulcer, and triamcinolone acetonide ointment was applied over the lesion. On the same day, symptoms had improved significantly, and oral intake became easier for the patient. He continued to be on recovery, and was discharged from hospital on 19th day of hospitalization. Currently we are following up on patient at our outpatient clinic, and entire body is being checked for any new abnormality.

In the present case, labolatory findings could not identify the cause of disease, and it made treatment difficult. In most cases, mouth aphthae and ulcers respond well to antibacterial medications, antivirus medications or steroids, but in our case all of these drugs were ineffective.

The monocyte ratio had been high in the white blood cell cont. Therefore, we believe that some virus caused the present intractable stomatitis, although we could not identify specific type of virus.

A definitive diagnosis of intractable stomatitis can be difficult during the course of treatment. If symptoms do not improve with intensive drug therapy within specific period of time, local treatment should be given to achieve pain control and nutritional control with ingestion. It is mandatory while searching for the cause and waiting for regression of oral lesions.
A Retrospective Study: Cystic Lesions of Mandible and Maxilla

Tetsuya Ikeda, Takehiro Matsuda, Tetsuya Satoh, Yuki Satoh, Naoyuki Kohno

Department of Oto-Rhino-Laryngology, Oral Surgery, Kyorin University School of Medicine

This study reviews the features of cystic lesion of mandible and maxilla operated on in our department from 2007 to 2011. The studied parameters were sex, age at diagnosis, clinical findings, radiographic aspect, anatomical site, histological diagnosis, prognosis and follow up records. A total of 36 cases of cystic lesions in the mandible and maxilla were reported in this period and all of these cases were benign lesions.

The most frequent histological diagnosis was ameloblastoma, followed by the follicular dental cyst and keratocystic odontogenic tumor.

The mean age was 34 years old, 64% of the patients were male. The rate of asymptomatic cases was 75.7%. Seventy-two percent of the mandible cystic lesions presented with an impacted tooth, the third molar tooth in 85 percent.

We prefer resection of large of cystic lesion with preserves surrounding bone. The surgical techniques used in the treatment of these patients were enucleation, marginal resection-excising portion of the mandible and maxilla to include the entire tumor while maintaining its continuity by sparing cortical bone.

Cystic lesions of maxilla and mandible occurred more frequently in males, in the second and third decades of life, and most cases were asymptomatic. Previous studies have showed that ameloblastoma and keratocyst are the most frequent epithelial odontogenic tumors of the jaw. We support these reports in this study.

Not a few histological findings or diagnosis were granulation fragments or chronic inflammation tissue, respectively. These results indicated that cystic lesions of maxilla and mandible were already exposed to normal bacterium at diagnosis.

We concluded the most important thing is careful observation to detect of any recurrence signs in terms of long term cure for our treatment.
Resolution of Vocal Fold Polyps with Conservative Treatment

Hideki Nakagawa¹, Makoto Miyamoto², Toshiyuki Kusuyama³, Yuko Mori⁴, Naoyuki Kohno⁵, Hiroyuki Fukuda⁴

1) Department of Otolaryngology, Seibo International Catholic Hospital
2) Department of Otolaryngology-Head and Neck Surgery, Kansai Medical University
3) Tokyo Voice Clinic
4) Tokyo Voice Center, International University of Health and Welfare
5) Department of Otolaryngology-Head and Neck Surgery, Kyorin University School of Medicine

Objectives: Vocal fold polyp is generally thought to require surgical removal. However, a certain proportion of polyps resolve with conservative treatment. This study was performed to clarify the frequency of spontaneous resolution of vocal fold polyp and to identify features associated with polyps likely to resolve without surgery.

Study Design: Retrospective study.


Results: Of 644 patients with the diagnosis of vocal fold polyp, 132 received conservative treatment, 433 were treated surgically, and 79 dropped out without attending for further consultation after the initial visit. Of those treated conservatively, 55 experienced complete resolution after a mean of 5.1 months of follow up from the outset, and 29 showed lesion shrinkage after a mean of 4.1 months of follow up. Polyps that resolved with conservative therapy were more likely than those that remained unchanged or enlarged to occur in women, to be smaller, and to have a shorter duration of symptoms. We could not determine the superiority of voice therapy.

Conclusions: At least 9.7% of vocal fold polyps might resolve without surgery. Conservative treatment should be considered as an option for selected patients with smaller and more recent-onset polyps.