Inverted papilloma is a benign disease. Its incidence among newly diagnosed tumors of nose and paranasal sinuses makes from 0,1% up to 3%. The case rate makes 0,6 cases per 100000 per year. It is most often diagnosed in male and the male-female ratio makes 5:1. Etiology of the inverted papilloma is still unknown, but some authors think that it is related to chronic infection of nasal cavity and paranasal sinuses, allergic reactions. Also, it is known that chronic rhinosinusitis with nasal polyposis can lead to transformation of polypoid tissue to pathological growth of the surface epithelium. The inverted papilloma is a proliferation of the surface epithelium and its invagination in the underlying tissues. This tumor usually develops on the lateral wall of the nose in the area of the middle nasal passage and often invades maxillary sinus and ethmoid labyrinth. The tumor is benign, but having an aggressive growth, it invades surrounding tissues, thus damaging the neighboring anatomic structures. Less often the mass is located in posterior parts of the nasal cavity. Treatment of the inverted papillomas is only surgical. Depending on the tumor expansion the necessary volume of surgery should be carried out. Primary goal of the treatment is maximum possible excision of the pathological tissue. There are several variants of various open and endoscopic endonasal approaches. According to the literature the recurrence rate of the papillomas makes about 3-19 %, malignization is observed in 5% of cases.

In the clinic of the Pavlov First Saint Petersburg State Medical University during the period from 2013 till 2016 we have performed 14 surgeries in patients with inverted papilloma. All the patients have undergone complete otorhinolaryngological examination, endoscopic examination of nose and nasopharynx, CT of paranasal sinuses.

Patient A., 57 years old, has come to our clinic for the first time in September 2015 complaining of complicated nasal breathing mostly at the right side, congestion of the right half of the nose. According to the anamnesis the patient had a nasal polyp surgery in 2012 by using polyp loop. CT of paranasal sinuses has shown total shadowing of the right maxillary sinus, shadowing of the cells of the ethmoid labyrinth at the right side. In September 2015 the patient underwent endoscopic right-side maxillary ethmoid sinusotomy. Postoperative period was normal. According to histological examination the inverted papilloma was diagnosed. In January 2016 control CT examination of paranasal sinuses showed a recurrent growth of the neoplasm with expansion to the right frontal sinus. (Picture 1) In January 2016 the patient underwent endoscopic endonasal right-side maxillary ethmoid frontal sinusotomy under control of electromagnetic navigation system (Picture 2). The neoplasia was visualized very well and was completely removed with the help of shaver, Blakesley forcepses with various bend angles. The papilloma bed was coagulated by diode laser in a contact mode. There were no complications during the surgery and in the postoperative period. The patient was discharged to outpatient treatment in 5 days. Histological analysis has confirmed the presence of the inverted papilloma (Picture 3, 4). In September 2016 at control CT examination there was no continued growth of the neoplasm (Picture 5, 6). It is worth noting that a recipe for successful operative treatment is complete extraction of the tumor from the nose and paranasal sinuses. Histological analysis should be made to all the patients suffering from chronic rhinosinusitis with nasal polyposis at the surgical treatment.