

A COMPARATIVE ESTIMATION OF THE RESULTS OF TRADITIONAL AND ENDOSCOPIC OPERATIONS AT REMOVAL OF SOME JUVENILE NASOPHARYNGEAL ANGIOFIBROMAS

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Introduction

Juvenile nasopharyngeal Angiofibroma (JNA) is a benign, but locally aggressive and extremely vascular Head and Neck neoplasm, occurring almost exclusively in the nasopharynx of adolescent males. JNA accounts for only 0.05% of all head and neck tumours¹.

On the present the basic method of treatment of patients with JNA the surgical method continues to remain. Among traditional operations applied at JNA, diffusion has received: trans palatal approach (and trans palatal with sub labial extension), trans maxillary approach (lateral rhinotomy/medial maxillectomy, midfacial degloving, le-fort I osteotomy approach, maxillary swing/facial translocation approach), lateral skull base approach (pre auricular sub temporal infra-temporal approach, infratemporal approach type C), combination of any two approaches.

Meanwhile, application various operations even at the adequate form growth tumor, and also high frequency of tumor "recurrence" (11-50%)^{2,4}, in itself ignore universality of these operations, that in the relation support radical surgical treatment and safety of functions anatomic structures, left much to be desired.

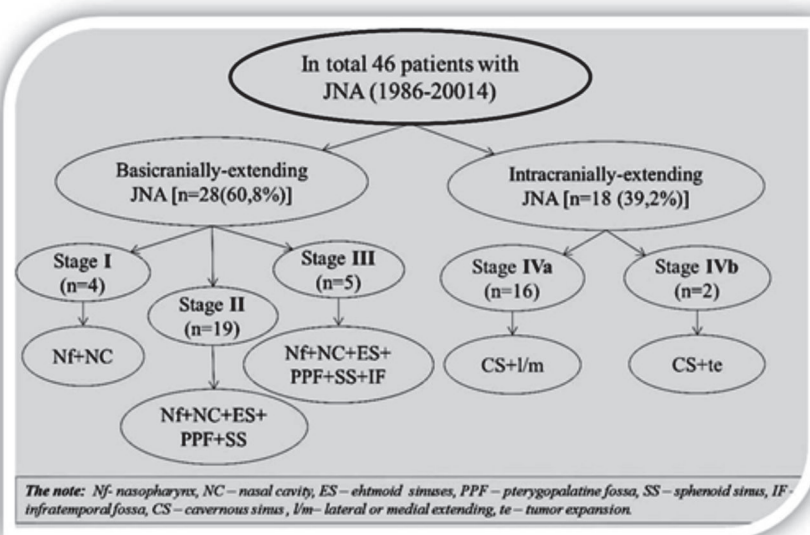
The introduction of the endoscopic surgery in rhinology, begun in 60th years, as adequate and non-invasive method, it is widely applied also at removal of some JNA now. According to the majority of authors, endoscopic endonasal operations can be justified basically at removal "small" and "average" tumors, i.e. in cases tumor localization in nasopharynx, nasal cavity, paranasal sinuses and pterygo-palatine fossa⁵⁻¹⁰.

A difference of the point of view concerning efficiency of endoscopic removal JNA, in particular, to the importance of the form growth and frequencies of tumor "recurrence" tumor, and also an operational hemorrhage, indicate on discussion questions of a choice of optimum operation in each case.

Objective

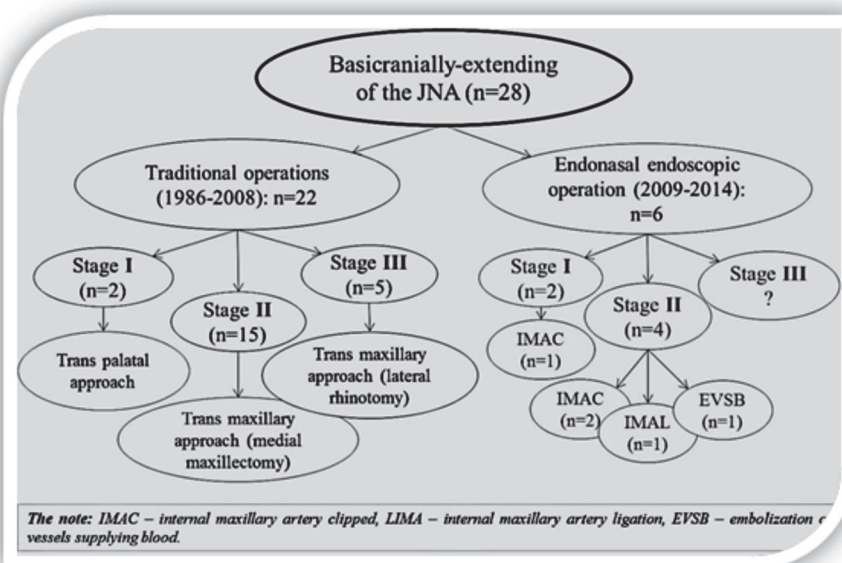
The comparative analysis of results of traditional and endoscopic operations at removal of some JNA.

Patients and methods

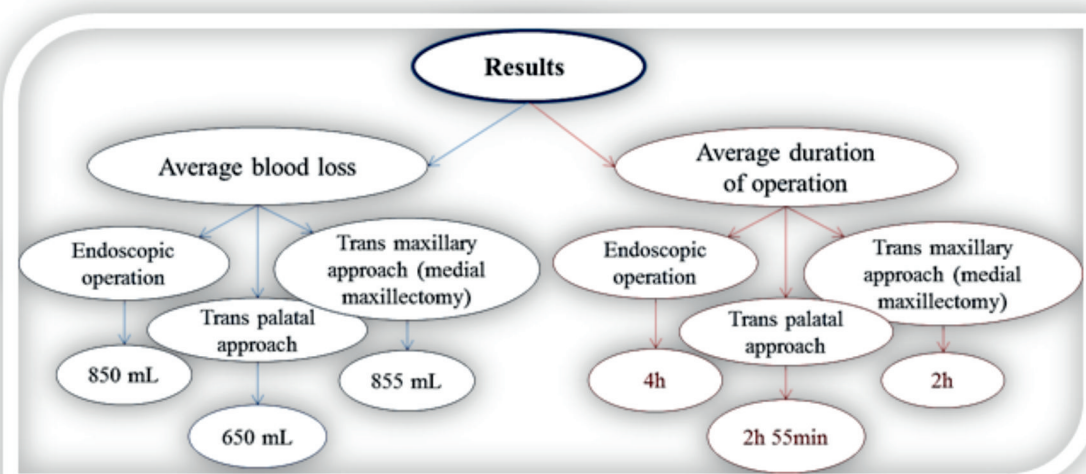


Under observation there were 46 patients with JNA at 28 (60,8%) from which was a basicranially-extending, at 18 (39,2%) patients - intracranially-extending tumors forms. Among patients with the basicranially-extended tumors, at 4 from them was stage I (tumor occupied nasopharynx and nasal cavity), at 19 - II (tumor occupied nasopharynx, nasal cavity, pterygopalatine fossa, ethmoidal and sphenoidal sinuses) and at 5 - III (along with listed anatomic structures, a tumor, occupied also infratemporal fossa) tumors.

Results



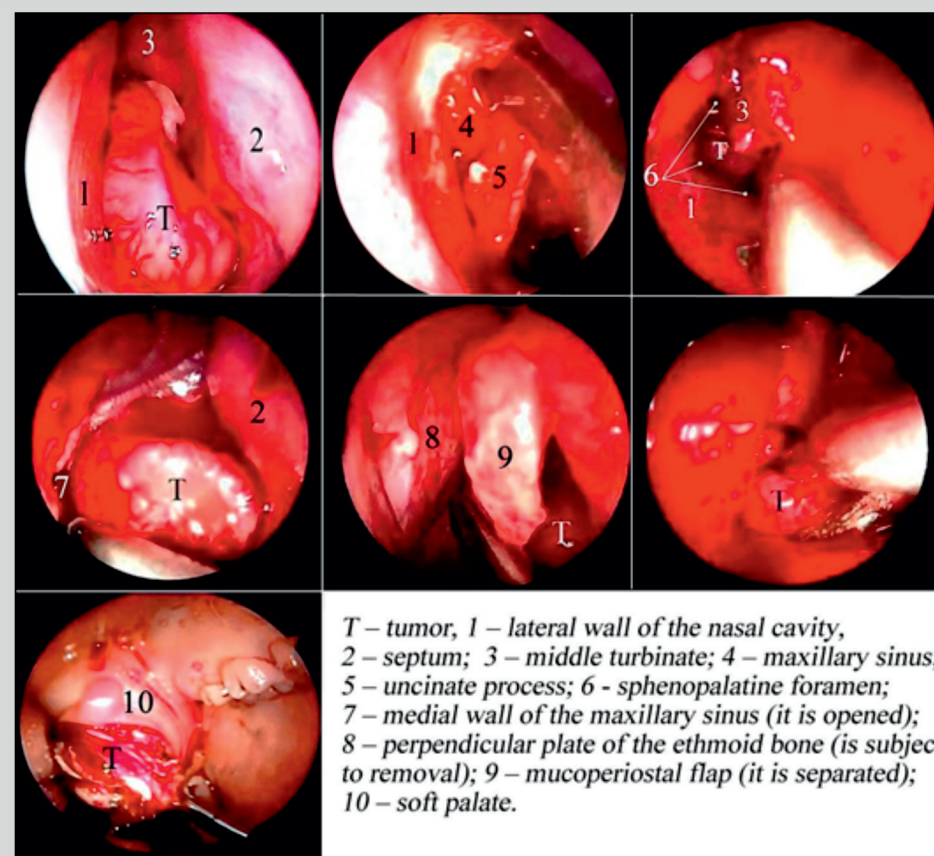
From 28 patients with basicranially-extending JNA, 22 patients (at 2 patients was stage I, at 15 - II and at 5 - III tumors) there were performed traditional operations. At the others 6 patients (at 2 patients was stage I, at 4 - II tumors) were made endoscopic endonasal operations. Patients with stage III tumors and/or intracranially-extended tumors, during introduction of endoscopic operation by us were no operations performed.



During observation of patients after endoscopic operation recurrent tumors were not found out. Despite the taken measures avoidance bleedings, blood loss thus on the average was 850 ml and duration of operation - 4 hours. Comparison the data of the operated patients, has shown on the superiority of the modified operations Owens (duration of operation was 2, 55 hours; blood loss - 650 ml) and Denker (duration of operation was 2 hours; blood loss - 855 ml) towards endoscopic operation at removal accordingly stages I and II tumors.

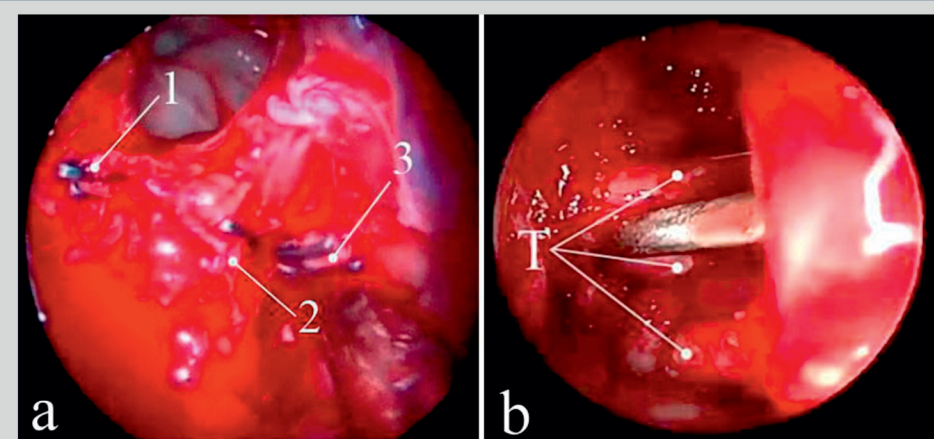
The highlights of endoscopic operation at removal I stage of tumors: mobilization of nasal and nasopharyngeal tumor segments.

- middle turbinate medioposition or resection;
- uncinectomy;
- anterior and posterior ethmoidectomy;
- identification of the sphenopalatine foramen: mobilization of nasal tumor segment (separation of the tumor from ethmoid and palatal bones structures);
- posterior part of the nasal septum resection (posterior septumectomy);
- mobilization of the nasopharyngeal tumor segment ("two nostrils - four hands").



The highlights of endoscopic operation at removal II stage of tumors: mobilization of the tumor in pterygopalatal fossa.

- modified endoscopic operation on Denker is in addition made: a resection of medial, anterior and posterior walls of the maxillary sinus;
- devascularization of tumor by means of occlusions maxillary artery;
- tumor mobilization in pterygopalatal fossa;
- endonasal or endooral removal of a tumor.



Conclusions

Endoscopic endonasal operation, as well as traditional operations (on Denker and- or Owens), provides radical removal of the majority basicranially-extending JNA (stages I and II tumors tumors). Owing to some parameters (least duration, easy performance operations, rather functionally-sparing the property, favorable aesthetic qualities, almost what absence or complications), the given operation does not surpass possibilities traditional operations, and can be used as method of choice at removal of some JNA.

Our modest experience of endoscopic operation does not apply for exhaustive and definitive opinion of effective removal of some basicranially-extending JNA, it induces to search of ways of rational application of the given operation, as at removal of the basally-extended (including stage III tumors), and intracranially-extending tumors more likely.

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