

METHODS OF EFFECTIVE DIAGNOSTICS THE NOSE AND ACCOMPANIED CAVITY IN JOINT INJURY OF MAXILLOFACIAL BONES

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ABSTRACT: Additional injuries: In practice, it is observed that the number of people in need of treatment in the intensive care units and rehabilitation departments of hospitals is growing from year to year due to joint injuries of the face, jaw, skull and nose. In practice, patients are forced to continue treatment for years due to secondary complications due to early diagnosis of nasal and nasal congestion injuries and untimely treatment, which leads to their inclusion in the disability group.

KEYWORDS: Epithelial activity, “bone” and “soft tissue”, cheekbones, fractures of various shapes.

INTRODUCTION

According to the World Health Organization, deaths from joint and head injuries are the third leading cause of death among working-age people with cancer and cardiovascular disease..

The mucous membranes that line the walls of the nasal and adjacent cavities, including the upper respiratory tract, are involved in almost a whole physiological activity. In joint injuries, however, this system is compromised. Traumatic disease develops in the body.

This can be expressed as the weakening of the ciliated epithelial activity covering the surface of the mucous membranes, changes in the composition of mucous secretions, all of which lead to disruption of self-cleansing, ie evacuation of the organ. And in the early stages of the development of complications of the disease appear..

Research purpose: Development of an effective method in the diagnosis of patients with joint injuries of the face and jaw bones.

Our research shows that in recent years the number of patients admitted to the Tashkent Medical Academy clinic for treatment of patients with facial and jaw joint injuries in

intensive care units, neurosurgery, otorhinolaryngology and facial and jaw surgery departments has increased. It was found that 70% of the causes of injuries were caused by road traffic accidents.

THE MAIN FINDINGS AND RESULTS

Patients under our supervision underwent clinical and paraclinical examinations. Including endoscopy, digital X-ray, CT and laboratory tests. As a result, patients were diagnosed with maxillary tumors of the cheekbones, tumors of the temples, forehead-panoramic tumors or complexes of the cheekbones, fractures of various shapes, fractures of the bony walls of the nasal cavity and soft tissue tears. In our follow-up of patients with facial bone injuries, 45.2% were found to have nasal fractures in the first place, fractures of the lower jaws in the second place, and fractures of the upper jaw in the fourth place.

The results of our observation confirmed the data in the medical literature. Sixty-seven patients with digital X-ray diagnoses had fracture displacement in 62 (92.5)%, hematosinus in 62 (92.5)%, bone pneumothosis in 62 (92.5)%, and CT in 27 patients. %) hemosinus was detected.

When comparative analysis was performed with X-ray examinations, the advantage of CT in determining the pathological process was clearly confirmed.

In addition, the density of the sinus cavity in the range of 1-3 days after injury is +/- 20Nb, +/- 30Nb, which indicates the presence of hemorrhage in the sinuses.

In computed tomography, corneal projection examination was performed in 2-5 mm thick sections starting from the anterior wall of the frontal bone cavity, and the posterior wall of the pons-shaped sinus was guided in a "bone" and "soft tissue" mirror mode. In particular, this method allowed to carefully study the cases of ostiomeatal complex and nasal cavity of the nasal adjacent cavities. In the axial projection, however, it was held in the plane of the upper wall of the frontal sinus, starting from the lower wall of the upper jaw, parallel to the hard palate. In doing so, we determined the condition of the walls of the nasal adjacent cavities, injuries, whether the eyeball was damaged brain tissue and the base of the brain. Based on the density indicators of the cells of the bone and soft tissues around the nasal adjacent cavities, the depth of the lesions, etc., was determined.

As a result, it was possible to diagnose fractures of the anterior wall of the frontal bone, fractures of the upper edge of the maxillary sinus, fractures of the lower edge of the eyeball, fractures of the cheekbones, anterior, medial, lateral, lower walls of the maxillary sinus based on surrounding tissue densitometry. It should be noted that in joint injuries of the facial bones,

26-96% of injuries of the adjacent nasal cavities were observed. Especially in joint injuries of the upper and middle parts of the facial bones, injuries of the nasal adjacent cavities occurred in 100% of all patients.

During the examination of patients on computed tomography, the average mathematical parameters of the organism, ie the different thickness and tissue density of the examined organ were evaluated. The condition of the injured organ and surrounding tissues, whether they were injured, the extent of the injury, its distribution, depth, relationship with the surrounding tissue and its characteristics were obtained.

The normative absorption of light by tissues is expressed on the Hounsfield scale, ie the density of water is 0, the density of bone tissue is +/- 1000Nb and air is 1000Nb.

As far as we know, X-ray examination can be diagnosed only when the tissue density changes by 15-20% for certain reasons, ie due to pathological processes. Computed tomography can detect a pathological process with a difference in tissue density of 0.5%.

CONCLUSION

Thus, we can summarize the results of our study as follows:

- In joint injuries of the facial bones, 26-96% of injuries occur in the nasal cavity.
- In joint injuries of the upper and middle parts of the facial bones, the injury of the nasal adjacent cavities was 100%.
- In joint injuries of the facial bones, one of the effective methods of examination of the nasal cavity is computed tomography.
- It is important to be able to measure the fractures of the nasal cavity in mm on computed tomography, and to determine the average density in the surrounding organs and cavities at the site of injury.

REFERENCES

1. Ichida M. et al. A repositioning technique for nasal fracture using the little finger //Journal of Craniofacial Surgery. – 2008. – T. 19. – №. 6. – C. 1512-1517.
2. Ye D. et al. Analysis of factors in successful nasal endoscopic resection of nasopharyngeal angiofibroma //Acta oto-laryngologica. – 2016. – T. 136. – №. 2. – C. 205-213.

3. Nigmatov I. O. et al. Post-Traumatic Defects And Face Deformations: Features Of Diagnostics And Treatment //The American Journal of Medical Sciences and Pharmaceutical Research. – 2021. – T. 3. – №. 01. – C. 55-66.
4. West B., Jones N. S. Endoscopy-negative, computed tomography-negative facial pain in a nasal clinic //The Laryngoscope. – 2001. – T. 111. – №. 4. – C. 581-586.
5. Papadimitraki E. D. et al. Ear-nose-throat manifestations of autoimmune rheumatic diseases //Clinical and experimental rheumatology. – 2004. – T. 22. – C. 485-494.
6. Kühnel T. S., Reichert T. E. Trauma of the midface //GMS current topics in otorhinolaryngology, head and neck surgery. – 2015. – T. 14.
7. Valencia M. P., Castillo M. Congenital and acquired lesions of the nasal septum: a practical guide for differential diagnosis //Radiographics. – 2008. – T. 28. – №. 1. – C. 205-223.
8. Edgerton M. T., Persing J. A., Jane J. A. The surgical treatment of fibrous dysplasia. With emphasis on recent contributions from cranio-maxillo-facial surgery //Annals of surgery. – 1985. – T. 202. – №. 4. – C. 459.
9. Tremaine W. H., Dixon P. M. Diseases of the nasal cavities and paranasal sinuses //International veterinary information service, Ithaca. NY (www. ivis. org). – 2002.
10. Gelesko S., Markiewicz M. R., Bell R. B. Responsible and prudent imaging in the diagnosis and management of facial fractures //Oral and Maxillofacial Surgery Clinics. – 2013. – T. 25. – №. 4. – C. 545-560.
11. Kondo M. et al. Computed tomography of malignant tumors of the nasal cavity and paranasal sinuses //Cancer. – 1982. – T. 50. – №. 2. – C. 226-231.