

A new anterior nasopharyngeal approach for the atlas tumor biopsy with the endoscopy and X-ray assisted

a. Background: The biopsy is difficult for the atlas tumor, there has no introduction about the anterior approach for the anterior arch tumor of atlas.

b. Purposes: To find a new anterior nasopharyngeal approach to the atlas tumor and study the practicability.

c. Patients and Methods: 1 case in QiLu hospital of Shandong University: male and 34 years old. We performed the anterior nasopharyngeal approach to the atlas tumor through the inferior nasal meatus with the help of endoscopy.

We study the distance data about the approach from the nostril to the atlas in MRI. Gallini biopsy needle was used.

d. Results: After general anesthesia, we performed the biopsy from the new approach, and the pathologic result is chordoma. The patient did not have any complications, such as bleeding, infection or spinal cord injury. The MRI measure data include the distance from the nostril, turbinate, uvula to the retropharyngeal. The effective coronal range of the atlas and the sagittal effective and safe distance have been obtained.

e. Conclusions: The anterior nasopharyngeal approach is effective for the atlas tumor with the endoscopy. The effective and safe range should be measured. The biopsy guide should include: double orientation, shortest distance, range measure, coaxial technology, endoscopy aid, tumor quality, hand feeling, specimen identification.