Chondrosarcoma of the larynx – a case report with a brief literature review

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This case report presents a 65-year-old male with a primary complaint for hoarseness. There were no difficulties in breathing or swallowing, and he had a neck lump. The endoscopic appearance revealed poor mobility of the right vocal cord and swollen and prominent right lateral and posterior wall of the subglottic area, covered with intact mucosa. Neck ultrasonography and MSCT showed no suspicious pathologic lymph nodes but MSCT revealed pathologic growth (44 x 35 x 30 mm), containing calcifications, circularly infiltrated into the cricoid cartilage and caudally into the trachea. Two direct laryngoscopies with biopsy were performed but there was no histopathological evidence of malignancy. Finally, a tissue sample obtained by a third biopsy revealed malignant cells. Control neck MSCT showed a size enlargement of the tumor (47 x 45 x 30 mm). A total laryngectomy was done. Histopathologic diagnosis of grade 3 laryngeal chondrosarcoma was established. The patient was discussed at the Oncology Tumor Board, and postoperative radiotherapy was indicated and completed without complications. A brief literature review revealed 766 laryngeal chondrosarcoma cases reported in English literature. Most of the patients were in the seventh decade of life. There were more males than females (the ratio 3:1). The most common surgical approaches were local excision and total laryngectomy. Radiotherapy and chemotherapy were rarely used in less than 1% of cases. The disease-specific 5-year survival rate was 91.4% with no differences when comparing the rates for location, grade, and therapy. A submucosal spread of chondrosarcoma often resulted in histopathological diagnoses which were false negative for malignancy. Therefore, an alternative open approach and laryngeal tissue harvesting through the cricoid cartilage fissure was recommended.

Key words: larynx, chondrosarcoma, biopsy, surgical treatment