Expression and clinical significance of LRRC4 in benign and malignant nasopharyngeal diseases

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ABSTRACT. The aim of this study was to investigate the expression of LRRC4 in nasopharyngeal carcinomas, nasopharyngeal precancerous lesions, and nasopharyngitis as well as the clinical significance of LRRC4. Fifty patients with nasopharyngeal carcinoma were selected as study subjects; 28 patients with chronic nasopharyngitis and 22 patients with nasopharyngeal precancerous lesions served as controls. Immunohistochemical analysis was used to study protein expression of LRRC4; the relation between LRRC4 expression and the clinical stage and histopathological features of nasopharyngeal carcinoma was also analyzed. The LRRC4 expression manifested itself as yellow staining in the cytoplasm or nucleus. LRRC4 was strongly expressed in nasopharyngeal epithelial tissues of patients with chronic nasopharyngitis and in nasopharyngeal precancerous lesions; the rates of positive results were 82.1 and 81.8%,
respectively. LRRC4 was weakly expressed in nasopharyngeal carcinoma tissues, at a rate of 10% positive results \( (P < 0.001) \); there was no significant difference in the expression of LRRC4 among different clinical stages and pathological grades. Therefore, disappearance of LRRC4 expression is a major feature of nasopharyngeal carcinoma.

**Key words:** LRRC4; Nasopharyngeal carcinoma; Nasopharyngitis; Nasopharyngeal precancerous lesion