論文要旨

Relationship between cytokeratin staining patterns and clinico-pathological features in somatotropinomae.

成長ホルモン産生下垂体腺腫における

サイトケラチン染色パターンと臨床病理学的所見

との相関に関する研究

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【序論および目的】

Somatotropinomae are classified as densely and sparsely granulated adenomae, which typically exhibit a perinuclear pattern (PP) and a dot pattern (DP) in cytokeratin (CK) immunostaining respectively. Some exhibit a mixed pattern (MP). We studied the relationship between these somatotropinoma subtypes and their clinico-pathological features.

【材料および方法】

The study population consisted of 141 Japanese acromegalic patients. We evaluated their clinical presentation and their response to provocation tests with TRH and LHRH and to suppression (octreotide) test. Tumour tissues were subjected to immunostaining for CAM-5.2, MIB-1, CD34, E-cadherin (CDH1) and p53 (TP53). In 43 cases (30 non-DP and 13 DP), we analysed gsp mutations (constitutively activating mutations of the G(s) α protein that is encoded by GNAS gene).

【結果】

The 141 adenomae were categorised into three subtypes based on their CK staining patterns; 30 (21.3%) exhibited DP, 83 (58.9%) exhibited PP, and 28 (19.9%) exhibited MP. Compared with the other subtypes, DP adenomae were significantly larger, and their E-cadherin expression and response to TRH, LHRH and octreotide challenge were lower. The

postoperative cure rate tended to be lower in DP adenomae. Gsp mutations were detected in 25 of 43 cases examined (58.1%); 20 of the 30 non-DP (66.7%) and 5 of the 13 DP tumours (38.5%) were affected by the mutation.

【結論及び考察】

DP somatotropinomae exhibit characteristic features. Compared with the non-DP subtypes, DP adenomae manifested a larger tumour size, a lower incidence of abnormal responses to TRH and LHRH challenge, a poor response to octreotide test and a lower expression of E-cadherin. gsp mutation was not exclusive for non-DP somatotropinomae.

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