

Connexins Expression in Adenocarcinoma of Nasal Cavity and Paranasal Sinuses

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Aim: To investigate the immunohistochemical expression of connexins (Cxn) 30, 32, 37, 43 in patients with adenocarcinoma of the nasal cavity and paranasal sinuses.

Methods: This was a retrospective study which included patients with adenocarcinoma of the nose and paranasal sinuses operated at the ENT Department of University Hospital Center Sisters of Mercy in an 11-year period (from 2007-2018). Immunohistochemical analysis was performed on a single representative block from 20 cases. We used primary antibodies for Cxn 30, 32, 37 and 43 (Abcam). Material was routinely processed and analyzed under the light microscope. Each section was analyzed in the whole mount two times. The first time under low power (x40) and the second time under high power magnification (x400).

Results: All cases showed negative reaction for Cxn 43, moderately positive reaction for Cxn 32 and extremely strong positive reaction for Cxn 30 and 37.

Conclusion: The preliminary data of our study showed the absence of the reaction for Cxn 43 and positive reaction of Cxn 30, 32 and 37 in patients with adenocarcinoma of nasal cavity and paranasal sinuses. These findings are in concordance with the results of studies performed on adenocarcinomas of the ovary, prostate, lung and stomach. Further studies are needed to explore the potential prognostic role of Cxn expression in these patients.

Key words: connexin, adenocarcinoma, nose, paranasal sinuses, immunohistochemistry