IJOHNS> Vol.2 No.1, January 2013

OPEN ACCESS

Salivary and Serum IgA Evaluation of Patients with Oro-Facial Squamous Cell Carcinoma

PDF (Size:114KB) PP. 42-45 DOI: 10.4236/ijohns.2013.21011

Author(s)

Taye J. Lasisi, Bidemi O. Yusuf, Olawale A. Lasisi, Efiong E. U. Akang

ABSTRACT

Objective: To evaluate salivary and serum levels of Immunoglobulin A (IgA) in patients with oro-facial squamous cell carcinoma. Methods: This is a cross sectional study. Patients with oro-facial squamous cell carcinoma attending the Oral Pathology and Radiotherapy clinics of the University College Hospital, Ibadan, Nigeria were included. Seventy subjects comprising 22 patients with untreated OSCC, 18 patients with OSCC receiving treatment and 30 healthy, age and gender matched individuals were included. Serum and salivary samples from the participants were analysed for IgA levels using ELISA technique. Results: The mean value of serum IgA in OSCC patients receiving treatment was significantly lower compared with healthy controls ($p = 0.03$), while no significant difference was observed comparing untreated OSCC patients with treated and healthy controls. The salivary IgA levels did not show any significant difference between the three groups ($p = 0.73$). Also, there was no correlation between serum and salivary levels of IgA among the subjects. Conclusions: Serum IgA appeared to be better index than salivary IgA levels in monitoring response to treatment in patients with oro-facial carcinoma.

KEYWORDS

Saliva; Serum; Immunoglobulin; Oro-Facial Squamous Cell Carcinoma

Cite this paper

T. Lasisi, B. Yusuf, O. Lasisi and E. Akang, "Salivary and Serum IgA Evaluation of Patients with Oro-Facial Squamous Cell Carcinoma," *International Journal of Otolaryngology and Head & Neck Surgery*, Vol. 2 No. 1, 2013, pp. 42-45. doi: 10.4236/ijohns.2013.21011.

References

[1] S. Silverman Jr., "Demographics and Occurrence of Oral and Pharyngeal Cancers. The Outcome, the Trends, the Challenge," The Journal of the American Dental Association, Vol. 132, No. 1, 2001, pp. 7s-11s.

[2] B. F. Adeyemi, L. V. Adekunle, B. M. Kolude, E. E. U. Akang and J. O. Lawoyin, "Head and Neck Cancer—A Clinicopathological Study in a Tertiary Care Centre," Journal of the National Medical Association, Vol. 100, No. 6, 2008, pp. 690-697.

[3] E. C. Otoh, N. W. Johnson, I. S. Danfillo, O. A. Adeleke and H. A. Olasoji, "Primary Head and Neck Cancers in North Eastern Nigeria," West African Journal of Medicine, Vol. 23, No. 4, 2004, pp. 305-313.

[4] B. W. Neville and T. A. Day, "Oral cancer and precancerous lesions," CA: Cancer Journal for Clinicians, Vol. 52, No. 4, 2002, pp. 195-215. doi:10.3322/canjclin.52.4.195

[5] M. Gene, "Immunoglobulins—Structure and Function," Microbiology and Immunology On-line, University of Carolina School of Medicine.

[6] S. J. Farnaud, O. Kosti, S. J. Getting and D. Renshaw, "Saliva: Physiology and Diagnostic Potential in Health and Disease," Scientific World Journal, Vol. 10, 2010, pp. 434-456. doi:10.1100/tsw.2010.38

[7] M. Navazesh, "Saliva in Health and Disease," Journal of the California Dental Association, Vol. 39,

IJOHNS Subscription

Most popular papers in IJOHNS

About IJOHNS News

Frequently Asked Questions

Recommend to Peers

Recommend to Library

Contact Us

No. 9, 2011, pp. 626-628.

[8] C. D. Donaldson, R. H. Jack, H. Moller and M. Luchtenborg, "Oral Vavity, Pharyngeal and Salivary Gland Cancer. Disparities in Ethnicity-Specific Incidence among London Population," Oral Oncology, Vol. 48, No. 9, 2012, pp. 799-802. doi:10.1016/j.oraloncology.2012.03.005

[9] G. T. Kovacs, O. Barany and O. Schlck, "Late Immune Recovery in Children Treated for Malignant Disease," Pathology & Oncology Research, Vol. 14, No. 4, 2008, pp. 391-397. doi:10.1007/s12253-008-9073-5

[10] S. Parveen, N. Taneja, R. J. Bathi and A. C. Deka, "Evaluation of Circulating Immune Complexes and Serum Immunoglobulins in Oral Cancer Patients—A Follow up Study," Indian Journal of Dental Research, Vol. 21, No. 1, 2010, pp. 10-15. doi:10.4103/0970-9290.62800

[11] N. N. Khanna, S. N. Das and S. Khanna, "Serum Immunoglobulins in Squamous Cell Carcinoma of the Oral Cavity," Journal of Surgical Oncology, Vol. 20, No. 1, 1982, pp. 46-48. doi:10.1002/jso.2930200111

[12] C. Dawes, "Salivary Flow Patterns and Health of Hard and Soft Oral Tissues," The Journal of the American Dental Association, Vol. 139, No. 2, 2008, pp. 18s-24s.

[13] P. D. de Almeida, A. M. Gregio, M. A. Machado, A. A. de Lima and L. R. Azevedo, "Saliva Composition and Functions: A Comprehensive Review," Journal of Contemporary Dental Practice, Vol. 9, No. 3, 2008, pp. 72-80.

[14] K. Vinzenz, R. Pavelka, E. Sch?nthal and F. Zekert, "Serum Immunoglobulin Levels in Patients with Head and Neck Cancer (IgE, IgA, IgM, IgG)," Oncology, Vol. 43, No. 5, 1986, pp. 316-322. doi:10.1159/000226390

[15] A. M. Brown, E. T. Lally, A. Frankel, R. Harwick, L. W. Davis and C. J. Rominger, "The Association of the IGA Levels of Serum and Whole Saliva with the Progression of Oral Cancer," Cancer, Vol. 35, No. 4, 1975, pp. 1154-1162. doi:10.1002/1097-0142(197504)35:4<1154::AID-CNCR2820350421>3.0.CO;2-D

[16] A. E. Krasteva, A. Aleksiev and I. Ivanova, "Salivary Components of Treated Cancer Patients and Patients with Precancerous Lesions," Journal of IMAB Annual proceeding, Vol. 2, No. 2, 2008, pp. 41-43.

[17] T. Shpitzer, G. Bahar, R. Feinmesser and R. M. A. Nagler, "Comprehensive Salivary Analysis for Oral Cancer Diagnosis," Journal of Cancer Research and Clinical Oncology, Vol. 133, No. 9, 2007, pp. 613-617. doi:10.1007/s00432-007-0207-z