Squamous cell carcinoma antigen level as a laboratory marker of sinonasal inverted papilloma

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Summary

Sinonasal inverted papilloma (IP) is a benign polypoid tumor usually arising from the lateral nasal wall. The term inverted is related to the inversion of the epithelium into the underlying connective tissue or stroma. The estimated incidence is one in 200 000 per year yet it must be noted that incidences are difficult to estimate due to underdiagnosis in some centers**.**

Sinonasal IP has a tendency to recur, usually within the first two or three postoperative years, but delayed recurrences are frequently seen. Recent cohort studies and reviews reported recurrence rates of 9–17% for cases exposed to endoscopic removal of the tumor and suggested that the risk of recurrence may depend on the extent of surgery. Many researchers had a great effort to find any useful laboratory tools that may serve as tumor markers that may help in early detection of recurrence of inverted papilloma.

After the first recurrence, the risk of a subsequent recurrences increases up to 58%. For clinicians, only limited clinical data are available that may aid in determining the risk of recurrence. Many authors suggested that factors such as tumor site, stage (including Krouse or Cannady staging), number of previous operations, association with human papilloma virus and smoking are predictors for recurrence of such cases.

Squamous cell carcinoma antigen (SCCA) is a protein with a strong homology to the family of protease inhibitors known as serpins. SCCAs are cytoplasmic proteins found in normal squamous epithelia, and in elevated levels in the serum of patients with squamous cell carcinomas, especially in cases of uterine cervix, lung and head and neck squamous cell carcinomas.

We found that SCCA can be considered as a reliable tumor marker for the diagnosis and following the prognosis of Sinonasal Schneiderian papilloma after surgery. This tumor marker can be a predictor of recurrence of this tumor and any rise in its serum levels after surgery indicates careful endoscopic and radiological monitoring of cases.