

## **Primary Squamous Cell Carcinomas of the External Auditory Canal in Sweden**

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### **Aims:**

To investigate the incidence, clinical presentation, and outcomes of squamous cell carcinoma in the external auditory canal (SCC-EAC) in Sweden.

### **Methods:**

Patients diagnosed with primary SCC originating in the skin of the external auditory canal during 2007-2017 in one of the seven University Hospitals in Sweden were included in the study (n = 47). Data was retrospectively extracted from the electronic health systems.

### **Results:**

The crude annual incidence of SCC-EAC was 0.5 cases per million inhabitants, with a median age of 70 years. Men constituted 64% of the cohort, but women more often had a higher stage (women 64 % vs men 50 % stage III-IV). Higher clinical stage predicted worse outcome. Treatment included surgery alone (32%), surgery and radiotherapy (47%), and surgery, chemoradiotherapy (11%), multimodal treatments were performed in 75% of stage III-IV patients. Complete remission at 6 months was achieved for 83% of the patients, however of these patients 17% experience a relapse (within mean 12 months after treatment). Relapse was successfully treated for two patients with T1 primary. The mean time until death for patients not in remission or after relapse was 8 months.

### **Conclusions:**

The incidence of SCC-EAC in Sweden during years 2007-2017 was lower compared to earlier reports. This discrepancy emphasizes the need for more precise coding and differentiation for future prevalence studies. The poor outcome among patients not considered tumour free after primary treatment or after a relapse highlight the critical need for effective primary treatment strategies.