

Carcinoma of the Parotid Gland: A Population-Based Study of incidence and treatment outcomes in 1018 patients in Sweden

Kar Sandström¹, Lovisa Farnebo², Anna Hafström³, Anders Westerborn⁴, Mattias Olin⁵, Eva Hammerlid⁶, Lalle Hammerstedt-Nordvall⁷, Maria Gebre-Medhin³, Britt Granström⁸, Tim Andersson-Säll⁹, Göran Laurell¹

¹ Uppsala universitet, ² Linköping universitet, ³ Lund universitet, ⁴ Örebro universitet, ⁵ Ryhovs sjukhus, Jönköping, ⁶ Göteborg universitet, ⁷ Stockholm universitet, ⁸ Umeå universitet, ⁹ RCC väst, Göteborg

Aim:

To analyse the epidemiology and outcomes of patients with carcinoma of the parotid gland (CPG) in Sweden during 2008-2019.

Methods:

We conducted a retrospective analysis of 1018 patients diagnosed with CPG between 2008 and 2019, as recorded in the Swedish Head and Neck Cancer Register (SweHNCR).

Results:

The age-adjusted incidence remained stable, with a mean of 0.51/100 000/year. Curative treatment was administered to 90% of the patients, with a recurrence rate of 9% within three years. The median time to recurrence was 496 days, varying by histopathology. The highest recurrence rates were observed in patients with salivary duct carcinoma and adenocarcinoma, whereas acinic cell carcinoma and mucoepidermoid carcinoma had low recurrence rates. In 42% of the cases, distant metastasis was the only recurrence site. The 5-year relative survival probability (rDSS) was 84%, varying by histopathology (96% for acinic cell carcinoma and 49% for squamous cell carcinoma). For stage I-II tumours, rDSS was unaffected by whether the malignant diagnosis was known prior to surgery or not. Male sex, increasing age, stage III-IV disease, and WHO/ECOG 2-4 were independently associated with increased overall mortality risk.

Discussion:

This study highlights the stable incidence, histopathological distribution, and survival outcomes of CPG in Sweden, consistent with previous Scandinavian reports. The histopathological type significantly affected recurrence rates and timing. The lack of impact of pre-surgical diagnosis on stage I-II survival rates is particularly noteworthy.