Abstract:

Complications after thyroid surgery

Approximately 2300 patients undergo thyroid surgery every year in Sweden. Some 5-10 % suffer from complications. Complications of thyroid surgery could be life threatening or cause functional impairment. This is a problem for patients as well as for the healthcare system. This thesis focuses on identifying risk factors and evaluating the prevention. In addition, mortality rate and the causes of early mortality after thyroid surgery is studied. Scandinavian Quality Register for Thyroid, Parathyroid and Adrenal Surgery (SQRTPA) is used as database for the study.

Paper-I: Focuses on post-operative surgical site infection. It is a retrospective nested case-control, multi-centric study on a prospective registered data in SQRTPA. Additionally data has been collected from the attending surgeons all over the country through a questionnaire. Lymph node dissection and the use of drain in the surgical wound were identified as independent risk factors. In addition, the use of prophylactic antibiotics was analysed in the study.

Paper-II Focuses on post-operative neck hematoma requiring evacuation through surgery, which is a life threatening complication after thyroid surgery. This study is also multi-centric, retrospective and designed as a nested case-control study. Older age, male gender and the use of drain in the surgical wound were identified as independent risk factors. Time pattern for post-operative neck hematoma was also analysed in the study.

Paper-III Focuses on post-operative hypoparathyroidism and damage to the recurrent laryngeal nerve in patients undergoing prophylactic central neck lymph node dissection due to papillary thyroid cancer. The study aims to evaluate whether prophylactic central neck lymph node dissection is more harmful than its benefit to prevent disease relapse. Data is used from SQRTPA for the study purpose. The study is planned to occur in the next year.

Paper-IV Focuses on mortality after thyroid surgery. There is no national study about this subject yet. Many elderly patients undergo surgery for both benign and malignant thyroid disease. Mortality among elderly and in general is unknown. The study aims to evaluate causes for early (30 days and 90 days) mortality and evaluates whether elderly patients (> 80 years) have higher mortality rate than the normal mortality rate in the same age group.