Background
The incidence, treatment and survival from neuroendocrine tumours (NETs) in New Zealand (NZ) has not previously been examined. Internationally, epidemiological descriptions of NETs are derived from institutional series or regional registries. In NZ there is a limited centralised record of NETs, as historically many were not recorded in the National Cancer Registry. We aimed to address this by compiling a national database of patients with NETs. We report initial data from a retrospective study, which includes every NET diagnosed in NZ over a 5-year period.

Aims
1. To identify all patients diagnosed with NETs in NZ. This was done in two groups; an in-depth picture of all NETs diagnosed in NZ between 2008 and 2012 (described in this poster) and a longer term view of NETs in the Auckland region diagnosed between 1995 and 2012.
2. To provide a definitive description of NET epidemiology and outcomes over this time period.

Methods
Our primary data source was the New Zealand Cancer Registry searched using ICD-03 codes. Secondary data was obtained from searches of public and private pathology records in every District Health Board (n=20). Clinical data was collected from individual medical records. We collected information on 3334 patients (presentation, tumour characteristics, investigation, treatment and outcome). A team of research nurses and healthcare professionals entered data via a remote desktop using MS Access and a SQL database, secured using a double-password system (University network and database login), according to a centralized protocol and data dictionary.

Classification of NETs was defined as per WHO 2010 nomenclature. Neuroendocrine tumours in the analysis included gastroenteropancreatic (GEP) NETs, bronchopulmonary carcinoids and neuroendocrine carcinoma; extrapulmonary small cell carcinoma, large cell carcinoma, medullary thyroid carcinoma, Merkel cell carcinoma, paraganglioma and pheochromocytoma and NETs of other primary sites such as gynaecological and genitourinary. Pulmonary small cell carcinoma was excluded. Age adjusted incidence rates were calculated using Statistics New Zealand data for the NZ population during each of the five years 2008-2012 (1), adjusted against the WHO age distribution of a standard population (2001).

Results
1736 patients were diagnosed with NET between 2008-2012. When adjusted for age, there is a 9% increase in incidence over the 5-year period. Age-adjusted incidence is comparable to incidence found in studies overseas(2).

• The burden of neuroendocrine cancer is greater than previously perceived with a rising incidence and a high proportion of metastatic cases at diagnosis.

• NETs of different organs have distinct variation in incidence and survival. This stresses the importance of individualized multidisciplinary case management.

• The incidence of NETs is rising in New Zealand. This rise is evident over the relatively short time period of 5 years.

• We believe this is the first analysis of NET incidence conducted on a complete national population, and therefore offers a level of accuracy not previously available.

Conclusions

References

Kate Parker
kate.parker@auckland.ac.nz