Brain and central nerves

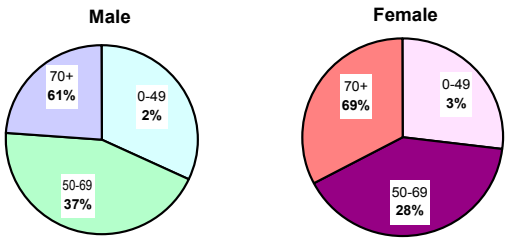
NICER and Swiss Cancer Registries

Raw data - Period 2003-2006

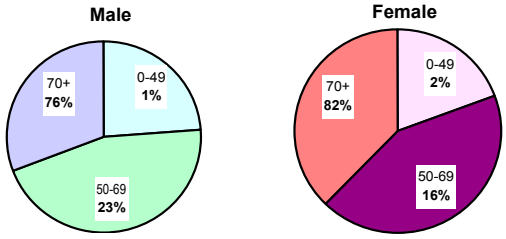
Gender	Yearly averages New cases (1)	Deaths (2)	5-year Prevalence (3)	Years of life lost (4)
Male	282	246	576	3900
Female	224	184	743	2596
Total	506	430	1319	6496

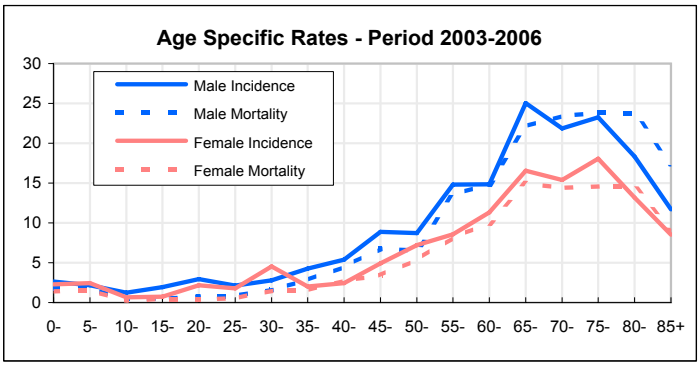
(1) Swiss estimates on basis of nine registries
(2) Computed from data of Statistical Federal Office
(3) Estimated from Globocan 2002, IARC - Lyon
(4) Years lost each year before age 75

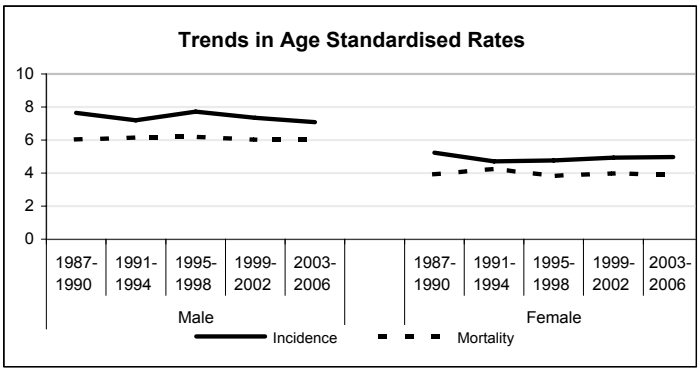
New cases by age group

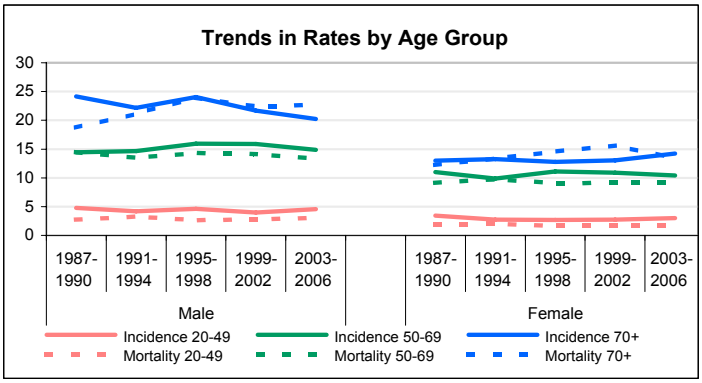


Deaths by age group









Brain tumours account for 85% to 90% of all primary central nervous system (CNS) tumours, which represent 1.3% (females) to 1.5% (males) of all cancers in Switzerland. The most frequent histologic types of brain tumour are anaplastic astrocytoma and glioblastoma, accounting for approximately 38% of primary brain tumours, and meningiomas and other mesenchymal tumours accounting for approximately 27%. Overall, the prognosis of brain tumour is poor: age standardized relative survival in Switzerland is about 44% at one year and 21% at five year (EUROCARE 4 data).

Few definitive observations on environmental or occupational causes of primary CNS tumours have been made : Exposure to vinyl chloride may predispose to the development of glioma, Epstein-Barr virus infection has been implicated in the etiology of primary CNS lymphoma and transplant recipients and patients with the acquired immunodeficiency syndrome have substantially increased risks for primary CNS lymphoma.

There are also few familial tumour syndromes (and respective chromosomal abnormalities that are associated with CNS neoplasms) such as neurofibromatosis, von Hippel Lindau disease, Li-Fraumeni syndrome or Turcot syndrome. Familial tumour syndromes with defined chromosomal abnormalities are associated with gliomas.

Seizures are a presenting symptom in approximately 20% of patients with supratentorial brain tumours and may antedate the clinical diagnosis by months to years in patients with slow-growing tumours

For patients with brain tumors, two primary goals of surgery are (1) establishing a histologic diagnosis and (2) reducing intracranial pressure by removing as much tumor as is safely possible to preserve neurological function. Total elimination of primary intraparenchymal tumors by surgery alone is extremely rare. Radiation therapy and chemotherapy options vary according to histology and anatomic site of the brain tumour.

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