


## Journal Article



## Intracranial tumors in adult population of the Varaždin County (Croatia) 1996–2004: a population-based retrospective incidence study

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### Summary

**Aim** To estimate the incidence of intracranial tumors in the adult population of the Varaždin County, Croatia, for the 1996–2004 period.

**Methods** Setting: Varaždin County General Hospital and four university hospitals in Zagreb, the capital of Croatia. Study period: January 1, 1996 to December 31, 2004. Incident patients: county residents admitted for newly diagnosed intracranial tumors according to the WHO diagnostic criteria. Demographic data were extracted from the 2001 Croatian census. Incidence rates (IRs) per 100,000 person-years (p-y) and annual IRs (per 100,000 persons) were determined and compared as incidence rate ratios (IRRs) with 95% CI.

**Results** For primary intracranial tumors (PITs), IR was 12.1/100,000 p-y (95% CI: 10.3–14.2), comparable in men and women. The highest incidence was recorded for

glioblastoma (IR 4.8, 3.7–6.2) and meningioma (IR 3.1, 2.2–4.2). The incidence of PIT was somewhat greater than that of metastatic tumors (IRR 1.58, 95% CI: 1.22–2.05,  $P < 0.001$ ). Metastatic tumors were more frequent in men than in women, especially metastatic lung tumors (IRR 6.08, 2.32–20.16,  $P < 0.001$ ). IRs of all PIT taken together, neuroepithelial tumors cumulatively, nonepithelial tumors cumulatively, glioblastoma and meningioma were higher in the population aged  $\geq 40$  vs. population aged  $\leq 39$  (all IRRs with 95% CI greater than 1,  $P < 0.05$  or  $< 0.001$ ), comparable in men and women. Women were somewhat older than men at the time of diagnosis of PIT: median difference  $-6$  years (95.1% CI:  $-10$  to  $-1$ ,  $P < 0.05$ ). Annual IRs for all these tumor categories showed increasing trends over the study period. Conclusion Overall, there was an increasing trend in the incidence of primary intracranial tumors in the Varaždin County. Data did not allow estimation for most of the specific tumor types.

Key words: intracranial tumors - Croatia - epidemiology

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